

Issue 11

MARCH 1996

£3.95

ATARI World

The Wonderful World of

Operating Systems

TOS getting you down?
We cover all your
OS options...

Fit to boot?

All the tools to control
start-up of your ST
reviewed

Syquest EZ-135

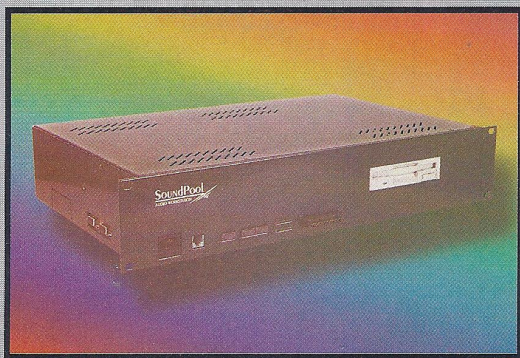
Are all E-numbers bad for your ST?

Reviews

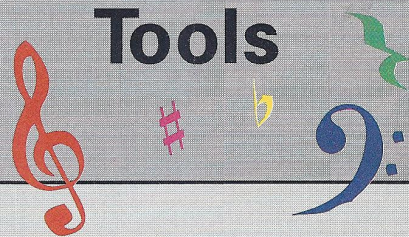
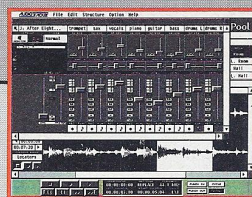
- Strip Cartoon ● Sheer Agony ● Sim City ● Ego
- ESG clipart ● SMS2 ● E-Copy ● Laserjet 5



SoundPool Pro Audio Tools



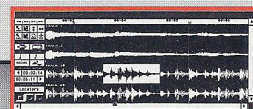
The SoundPool Audio Workstation has been designed for professional studio use. The 19" 2U Rack integrates the Falcon030 computer, Hard Disks, DAT I/F & extra MIDI outputs.



Audio Tracker

8 Track Hard Disk Recording Software.

A 4, 6 or 8 track digital recording system with built-in mixer and digital effects processor designed to meet demanding real-life studio situations. Audio Tracker generates and synchronises to MIDI Time Code and allows MIDI remote control. Well suited for professional video post production and an ideal companion for Cubase and Notator. Price £159.00



Falcon CDR Software

Press your own Audio CD's on the Falcon 030. The software manages audio files (AIFF, AVR and WAV) to create 'Red Book' compatible CD's. Features include PQ Editing, Selectable Pre-Emphasis, Copy Protection for each track and more. Available from only £159.00. Ask for complete CDR systems.

Realtime FFT Analyser and Peakmeter

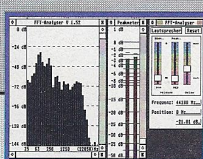
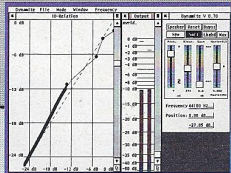
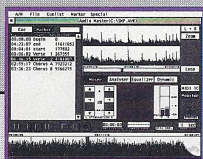
Precision measuring software for frequencies from 5Hz to 48KHz with linear, logarithmic, 3rd band and 'Sonogram' modes. Can be used with AudioMaster or as a stand alone program. Price £199.00

Dynamite - The Dynamics processor

The freely adjustable I/O curve allows the software to work as a compressor, expander, limiter or noisegate simultaneously at different level ranges. Can be integrated into AudioMaster. Price £199.00

ADAT Interface

The missing link to ADAT 8-track recorders, FX units, synthesizers, samplers and mixers. The Falcon can now record up to eight tracks simultaneously. £495.00



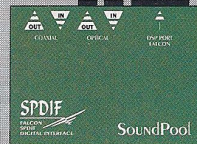
Audio Master

Stereo Digital cutting and pre-mastering Software for musicians, producers and sound engineers who want to get the best results from their recordings. Scrubbing, non-destructive editing, markers on the fly, bar editing, crossfades in realtime and more. Audio Master can be expanded into a complete audio mastering workstation with optional DSP software modules (6 parametric equalizer, Compressor / Limiter / Gate, Analyser) eliminating the need for costly U-matic pre-mastering facilities. Price £229.00



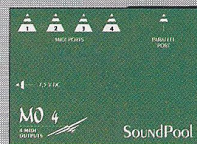
FDI - DAT interface

The vital link to DAT recorders, CD players and the exciting Yamaha ProMix 1. Compatible with Cubase Audio and Notator Logic. £229.00



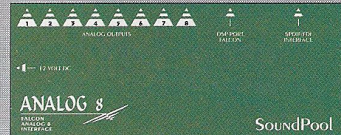
Four extra MIDI outputs

64 additional MIDI channels compatible with Cubase and all Atari Computers. Comes with M.ROS driver. £149.00



Analog 8/4 Interface

FA4 £199.00
FA8 £349.00



4 or 8 high quality 16 bit Digital to Analogue converters with linear frequency response from 20Hz to 20kHz and line level output to meet professional recording standards.

All prices include VAT

To order and for more information
or FAX 0181 693 6936

Tel: 0181 693 3355

☐ I am interested in the Audio Workstation

☐ Please send further information

☐ I own a Falcon please send the demodisk

Name: _____

Telephone: _____

Address: _____

Postcode: _____

Post to: System Solutions
17-19 Blackwater Street,
London. SE22 8RS

System Solutions

More quality music products from



A quality exxos scan 01/05/98

System Solutions is a trademark of Brandt Fernandes (Europe) Limited. Company registered in England 2612998

http://exxos.www.idnet.com/IMPULSE/atari/last/

advertisers **INDEX**

Atari Workshop 48
Windsor Business Centre,
Vansittart Road, Windsor SL4 1SE
Tel: 01753 68909

Compo Software 51, 65, 80, 99
Unit 3, Green Farm, Abbots
Ripton, Huntingdon, Cambs
PE17 2PF
Tel: 01487 773582

Floppyshop 14, 47
P.O. Box 273, Aberdeen AB9 8SJ
Tel: 01224 312756

Gasteiner Technologies 24, 25
126 Four Street, Upper Edmonton,
London N18 2XA
Tel: 0181 345 6000

Goodman PDL 87
16 Conrad Close, Meir Hay Estate,
Longton, Stoke-on-Trent ST3 1SW
Tel: 01782 335650

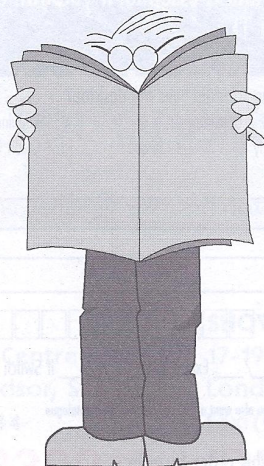
HiSoft B/C
The Old School, Greenfield, Beds
MK45 5DE
Tel: 01525 718181

LAPD 20, 21
P.O. Box 2, Heanor, Derbyshire
DE75 7YP
Tel: 01773 761944

Merlin 34
P.O. Box 77, Stroud, Gloucester
GL6 9YD
Tel: 01452 770133

System Solutions 2, 3, 61, 74
The Desktop Centre, 17-19
Blackwater Street, East Dulwich,
London SE22 8RS
Tel: 0181 693 1919

The Upgrade Shop 29, 30, 31
37 Crossall Street, Macclesfield,
Cheshire SK11 6QF
Tel: 01625 503448



ATARI World

Editor: Andrew Wright
Art editor: Ken Sims
Staff Writer: Kevin Beardsworth
Technical editor: Ofir Gal
Features editor: Nial Grimes
PD editor: Joe Connor

Contributors:
Mark Baines, Denesh Bhabuta,
Maurice Collins, Joe Connor, Ben Hall,
Steve Delaney, Jon Ellis, Iain Laskey,
Carl Löfgren, Günter Minnerup, Paul Rossiter,
Graeme Rutt, Shiuming Lai, Harry Sideras,
John Hetherington.

Photography: Hannah Gal
Technical director: Karl Brandt
Publisher: Neal O'nions

All written enquiries to: Atari World,
Unit 3 Green Farm, Abbots Ripton,
Huntingdon, Cambs PE17 2PF

General Enquiries/Subs/Reader Disk orders:
Sarah Church. Tel: 01487 773543
Fax: 01487 773581

Scandinavian subscriptions:
Sven Bornemark. Tel: 040 545454

Reader Disk technical support: Joe Connor
Tel: 01206 852602 (Weds, 19.00 to 21.30)

Editorial Enquiries: Andrew Wright
Email: atari_world@cix.compulink.co.uk

Colour reproduction by Meridian House plc
Tel: 01733 312313

Printed by Goodhead Heatset
Tel: 01869 253322

World-wide distribution by SM Distribution
Tel: 0181 677 8111; Fax: 0181 664 6216

Atari World is published by Specialist
Magazines Ltd (Registered office: Salisbury
House, Station Road, Cambridge CB1 2LA)

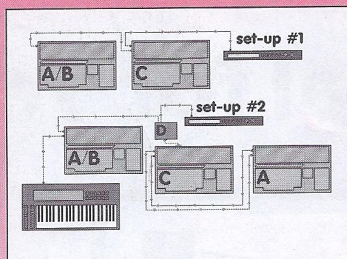
No part of this publication may be
reproduced, stored in any form of retrieval
system or transmitted in any form by any
means, mechanical, electronic or otherwise
without the specific written consent of
Specialist Magazines Limited

All rights reserved including translation into
other languages

© 1996 Specialist Magazines Limited



contents



FEATURES

19 Multiple MIDI
Danny Macaleer gets his STs together...

26 BASIC
Ofir Gal with the next instalment in his BASIC series.

40 SMS2
Mike Edwards reports on life with SMS 2.



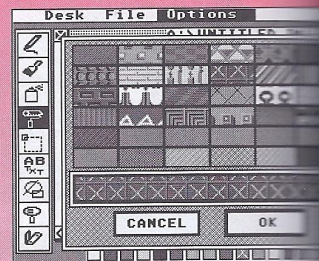
REVIEWS

9 Laserjet 5L
Mr Minnerup gets a new printer.

16 Confusion
Denesh Bhabuta gets in a muddle with Confusion.

17 Strip Cartoon
Not another Issue 4.... can you and your ST produce cartoons?

18 Sheer Agony
Graeme Rutt finds this one a real pain.



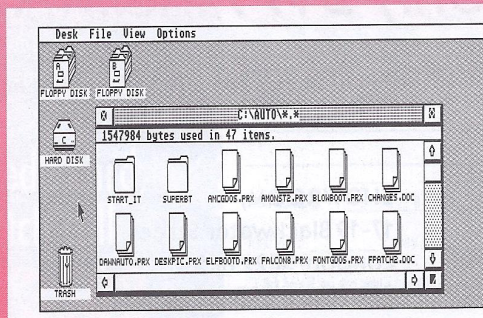
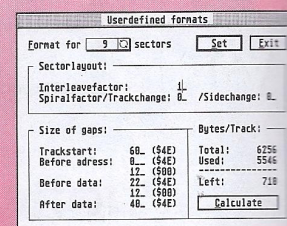
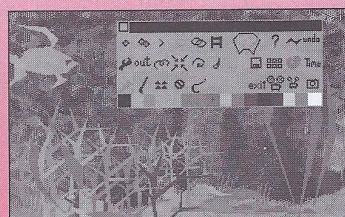
22 Compo classics
Compo relaunches some classic ST software.

28 EZ-135
Kevin Beardsworth tests the new EZ-135 drive.

32 Ego
Kevin Beardsworth boosts his Ego with a classic game.

28 CD heaven
Denesh Bhabuta discovers two new Atari CD ROMs.

42 Ecopy
Carl Lofgren with the copy on Ecopy.



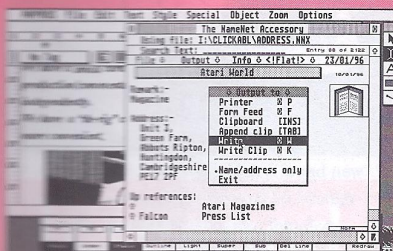
STSource

Text Editing & Boot Managing with your Atari

43 ST Source

Everything you wanted to know about text editors and boot managers but were afraid to ask. Starring Nial "Go for it" Grimes.

REGULARS



6 News

There's always something new on the Atari scene.

10 Letters

Big ed goes it alone as the readers hit back.

13 Clubbin'

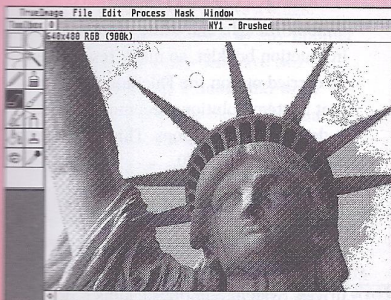
Harry Sideras with his new look column.

15 Reader Disk

More goodies for you to enjoy, courtesy of King Connor.

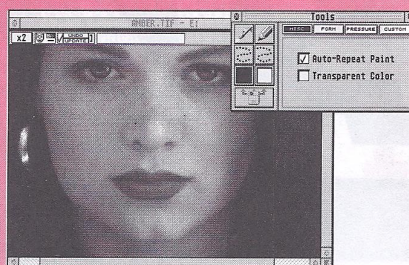
35 Inside the ST

Processors get the Paul Rossiter treatment this month.



38 Image Processing

Gunter Minnerup continues his top flight tutorial.



75 STranded

Graeme Rutt puts his reputation on the line.

76 Never mind the language

Programming theory with guru Jon Ellis.

78 Threads and Things

Graeme Rutt's new CIX column kicks off.

78 The Web

Graeme Rutt looks at some interesting Web sites.

81 PD Arena

The best PD pages you'll ever see - Joe Connor guarantees it.

88 PD Arena Games

Nial Grimes gets up and at 'em again.

92 Q and A

Your questions answered by our technical team.

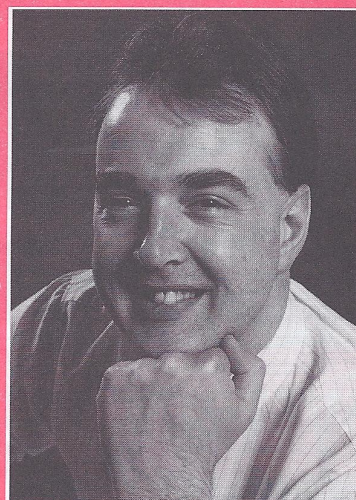
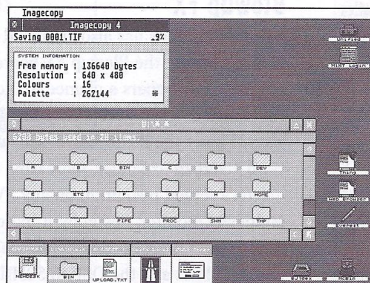
Don't miss the
March issue on sale
15th March

ATARI Pro

Operating Systems on your Atari

59 Atari Pro

The lowdown on operating systems from new tech-head Xav.



CH-CH-CHANGES

This month we've brought in a lot of changes. Perhaps too many at once, I don't know. The trouble is, with the price of paper shooting up, and other costs spiralling, we had to do something. Producing a low-circulation magazine like *Atari World* brings plenty of risks and we believe this is the way forward, to use that hackneyed phrase. Time will tell but if nothing else, I'm quite prepared to bet that we get twice as many letters next month!

Aside from the obvious physical changes we've appointed Kevin Beardsworth as a staff writer. Kevin will be well known to many of you through the Falcon Fact File and he brings a lot of expertise to the team on a full-time basis.

Our Pro section on operating systems this month is written by a newcomer, Xav, and I'm pretty sure you'll enjoy it. I certainly did.

As part of a drive to get more of you onto the online conferencing system CIX, we've got a special offer so that modem owners can have the £25 joining fee waived. We're also publishing extracts from the conferences to give you the flavour of CIX and what it's all about. See you there!

Next month we're hoping that all the software we've been promised finally arrives. System Solutions has assured us that NVDI 4 and MagiC 4 will be available for a full review and we're hoping to have our own Falcon upgraded rather dramatically. Until then...

Andrew Wright, editor

NEWS

System Solutions product bonanza!

Who says the Atari is dead? Certainly not System Solutions. The UK-based Atari specialist has just released the long-awaited upgrade to its multitasking operating system, MagiC. MagiC 4 is Falcon-compatible, including support for the DSP and IDE hard disks. New features for all Atari users include a write-back daemon (intelligent write-ahead disk caching), a new, improved file-selector and (when combined with HD Driver 4.5) full multitasking of all disk functions with other programs.

One of the most dramatic improvements, says System Solutions, is the built-in desktop. It has a 3D look, colour icons (100 supplied) and background graphics. It even features a file search utility (with comprehensive filters), a GDOS font selector, support for Kobold (the high-speed file manipulation tool) and much more.

One neat feature is the auto-locator, which is available from the desktop or file selector. This enables you to select files or folders simply by typing the first few characters of its name.

The full package costs £69.95, with upgrades from MagiC 2 at £39.95. If you are upgrading, System Solutions ask that you send back your original disk and manual. A special bundle is available for MagiC 4 and Kobold 2.5 at \$99.95.

Famous fours

NVDI 4, the latest version of the Atari's premier screen accelerator, now offers a GDOS extension and vector font handler for Speedo and TrueType fonts that now boasts a number of new improvements. First amongst them is the font utility – a very useful program that enables you to view and list fonts whether they're installed or not.

Fonts can be grouped into families (for example, the roman, bold, and italic versions of one typeface can be put in one folder) and, at last, it's possible to install

and uninstall fonts easily without re-booting the machine. There is support for Windows 95-specific TrueType fonts as well as the new UNICODE format that enables up to 65,000 different characters to be held in any one font file. This is commonly used for multi-language files to hold typefaces for all available alphabets.

The print handling aspect of NVDI 4 has been improved as well. The parallel print routines are faster, there are more printer drivers and better support for colour printers – including control over saturation and graduation. You can also print out test pages to fine tune page sizes and the maximum printable areas. According to System Solutions boss Karl Brandt, the colour printing routines in NVDI 4 produce better output than even Imagecopy. We hope to bring you a full review as soon as we can lay our hands on it.

For professional users there is an optional module that gives NVDI 4 the ability to use Postscript Type 1 fonts. These are the standard in the medium to high-end professional WP and DTP markets and give NVDI 4 all the font formats previously available to users of the SpeedoGDOS package.

NVDI 4 costs £59.95 and comes with 8 brand new fonts. Upgrades from NVDI 3 cost £19.95 and from the older NVDI 2.5 cost £39.95. The Postscript Type 1 font module costs £24.95. A version of NVDI 4 for MagiCMac is also planned in the near future.

Blowup FX

System Solutions has also launched a new Falcon booster, the Blowup FX board. It offers Falcon owners a chance to increase the power of their system in three different ways. Firstly the board has the Blowup Hard 1 screen expander, increasing the Falcon's screen resolution on any SVGA or Multisync monitor. Secondly it increases the speed of the CPU to 40MHz, the CPU bus to 20MHz and the DSP to 50MHz.

Thirdly – and perhaps most exciting – you can also use the board to increase the Falcon's memory in stages rather than going from 4Mb straight to 14Mb, thanks to the board's standard 30-pin SIMM sockets. System Solutions claims that 6, 8, 10, 12 or 14Mb Falcons are now possible.

The memory in the Blowup FX board is recognised as extended memory, like FastRAM yet is able to be used for normal ST RAM-only tasks such as DMA sound. Steinberg has already upgraded Cubase Audio to work with the board. The BlowUP FX controller chip software can be upgraded in future and an upgrade is planned to enable owners to use more than 14Mb of RAM.

So far System Solutions has found the board to be highly compatible, working with Cubase Audio, Apex Media and DA's Layout, for example.

Blowup FX costs £179. Fitting is difficult though, and while there is a good instruction booklet, so many tests have to be carried out on the Falcon before fitting that System Solutions recommends that it is done in its workshops. This will cost between £60 and £70.

ExtendDOS Pro 2.3

A new version of ExtendDOS Pro is now available for all owners of SCSI CD ROM drives. System Solutions claims it offers more support for CD ROM drives and an enhanced Audio CD player. As well as support for more single-disk drives ExtendDOS Pro is now able to work perfectly with CD ROM multi-changers which often use logical units (LUNs) to describe each CD slot.

The Audio CD player now uses a 3D look in screen resolutions with 16 or more colours and has more controls for the play back – including the ability to play back segments of any Audio CD. One revolutionary new feature is the "CD Record" function, which enables you to copy sections of Audio CDs to your hard disk (in AVR format) ready to be used in

sampling software. However this function will only work with compatible CD ROM drives.

This is very different to sampling sound as it literally copies, bit by bit, the digital audio data, guaranteeing a perfect sample. System Solutions is quick to point out that this should not be used to steal other people's work (it can be copyright theft) but it is perfect for the kind of copyright free sample disks you find on music magazines or the royalty free collections that are widely available.

ExtenDOS Pro comes with a brand new manual, developed and printed by System Solutions, for £39.95. It is also bundled with its CD ROM drive systems, which start at £269 for a quad speed Toshiba

drive. Upgrades are also available, costing \$5 from version 2.x and £15 from 1.x.

Cartridge port CD ROM

The Atapi cartridge port CD ROM drive is a new hardware product that enables Atari users to connect standard IDE CD ROM drives to their Ataris via the cartridge port. IDE drives tend to cost less than SCSI mechanisms (thanks to the PC market). As a result System Solutions is offering an all-in package for a mere £249 for quad speed and £189 for twin speed drives. The cartridge interface alone costs £79.95.

As always, System Solutions can be contacted on 0181 693 3355 but with all these products in stock, you might have to take your turn!

NEW NAMENET

Roger Derry has announced version 4 of the respected name and address database, Namenet. Namenet has a clear and easy to use interface based on classic GEM windows rather than elaborate icon panels. Namenet 4 can now include four separate but linkable databases in the one Namenet file. Namenet's sophisticated link system connects related entries, making rapid retrieval much easier. Entries can even consist entirely of links allowing you to make "instant lists" such as committee memberships, Christmas card lists and so on. These lists are automatically updated when a linked entry is changed.

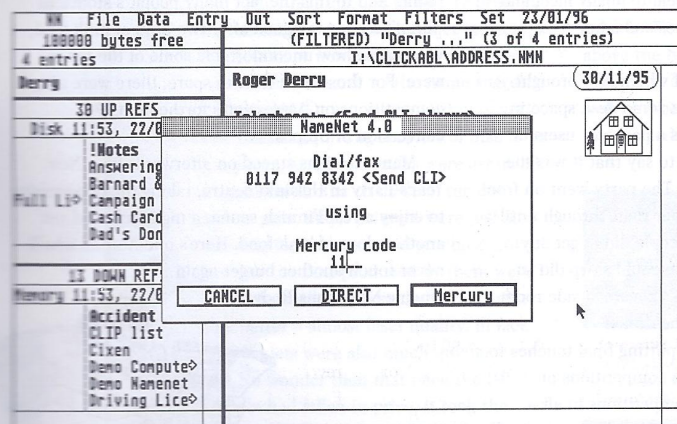
Namenet's master address system, called "cross-linking", allows a single master address to be used by any number of entries. Each entry can have two addresses: typically a home and work address. You can dial a telephone number by clicking it on the screen if you have a modem attached and if you use Mercury or other trunk line providers, Namenet will automatically choose when to use this or dial the number directly. The PIN code is

kept in encrypted form for added security. If your provider allows you to allocate cost centre codes then you can arrange for specific entries to use particular codes.

The new version contains the extra functions that were only available in Namenet 3 Professional. For 1Mb machines there is a slightly cut-down version (Namenet Light) that makes extra memory available. This lacks the dynamic memory allocation for multitasking and is roughly equivalent to the earlier Namenet 3. Both versions are supplied on the distribution disk though a special key is needed to access the full list of features.

Namenet 4 also has a read-only accessory too so you can retrieve data easily when running word processors and other programs.

Namenet is now a shareware product and registration costs £15 (\$5 upgrade fee for existing users). It will be freely available on bulletin boards and PD libraries or direct from Roger Derry, 38 Leopold Road, Bristol, BS6 5BS on 0117 942 8342. The email address is rderry@cix.compulink.co.uk.



Dialling out from Namenet 4.0

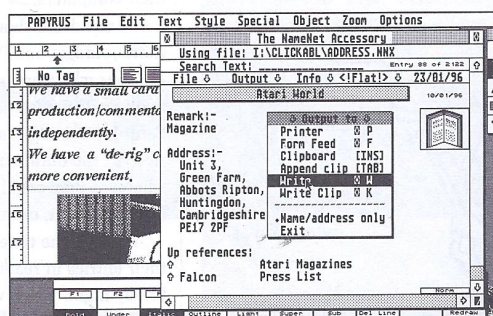
SMS SELLS

Furst Ltd, the Southampton-based developers of the replacement Atari operating system SMS2, has announced that it has just sold its 600th cartridge. The innovative operating system is cartridge based and features pre-emptive multitasking and a highly stable environment – see the update from Mike Edwards on page 19 for further details. "We don't see it as just a replacement operating system," said Furst director Philip Gutteridge. "We see it as much more than that. We developed it to be a low cost but very powerful operating system that could be used to run all kinds of day to day applications. We came up with the concept first and then a platform to run it on. Although we have a version for the PC – and we could easily port it other platforms if needed – it was the Atari that was the obvious choice. It is certainly the cheapest computer on the market but there are two things that are really important. It has a superb high resolution display and it has built-in MIDI ports for networking, which we included in SMS2 as a low-level feature.

"What the Third World needs is a very low-cost computer available in all kinds of configurations. We aim to build a simple box to run SMS2 on, which should retail for around £130. At these prices we'd have to sell a lot of them as the margins won't be very big, but not many people in places like China and India can afford PCs. It'll be based on a 68000 type embedded processor and should be around five times faster than an ST. The entry level option will probably look similar to the Atari, being an all in one unit, but we could have other versions, perhaps with rugged cases for industrial use and so on."

In terms of software, SMS2 has more going for it than many TOS and GEM users would expect. Most was written by keen users but it compares well with many shareware programs on the Atari and other platforms. The list includes a word processor written by an Iranian architect, a spreadsheet from a German lawyer and Internet applications written by an Omani mainframe programmer!

"When we launched the program we expected to sell it to students and hackers, people like that," explained Gutteridge. "We anticipated it would mainly be of interest to hobbyists and programmers but we got quite a shock when sales showed it was ideal for business users. Most people don't realise how many users there are out there who are putting their STs to work making money and running businesses. One of our clients is a large wholesaler of sporting goods with a turnover of about £4 million a year. They threw the PCs out of their accounts department and now have a network of STes that control stock, invoicing and so on. SMS2 is so powerful that they can run several applications at once and display a complete picture of the business in terms of graphs, charts and figures with the press of a button." Furst Ltd is on 01489 894674 or you can email them at furst_uk@delphi.com.



The Namenet accessory

SNIPPETS

Goodman International has taken over distribution of the well-respected printer driver and art package, Imprint. The program runs on any ST or STe and contains drivers for a wide range of dot matrix printers, both colour and black and white. It also has some basic but useful built-in painting tools. It will retail at £14.95 and comes complete with manual.

Genealogists and researchers will be interested in a new program from E G Richards. It converts dates from one format to another between twelve calendars, including Gregorian and Julian dates from 9999BC to 9999AD, Easter and festivals from 325AD, and English Regnal dates from 1066AD. Not to mention Coptic, Egyptian, French Revolutionary, Islamic, Mayan, Roman, Jewish and Saka, of course. The cost of the program is £10 from 2 Peckarmans Wood, London SE26 6RX.

PARIS ATARI SHOW

The French Atari scene isn't known very well, but with over 8,000 Falcon owners across France, *Atari World* decided to go along and see what was happening. The show took place in Paris on the weekend of 16-17th December and was organised by Oxo Concept. A few new products were on display, including Alias's Vision and Oxo Concept's Centurbo.

Vision is an image processing program making full use of the special hardware and features of each of the Atari computers. It is an art, retouching, conversion and cataloguing program rolled into one. Vision whizzed through all the jobs thrown at it, feeling faster on a Falcon than comparable programs on PCs and Macs.

Oxo Concept seemed busy demonstrating software and showing off various hardware add-ons. Most of the products at the show were geared toward Falcons, and Oxo's products were no different. They were displaying Centurbo I, a Falcon accelerator that is fully compatible with Cubase Audio. Boosting the CPU, FPU and DSP to 40MHz it increases the screen resolution by driving the graphics processor at 50MHz. Oxo also informed us that a Centurbo II was in the works and would drive the Falcon at either 60 or 80MHz and give it a 32-bit bus.

Other hardware by Oxo included a PC style tower case for all Ataris, a PC keyboard adapter and a screen resolution enhancer. On the software side they were showing Studio Son, a direct to disk music program supporting 4 stereo tracks and costing around 400 pounds.

The Eagle was on display at Le Becane, who were also selling the Afterburner 040 accelerator (being

distributed by Compo in the UK) and Nova graphics cards. And the famous Atari spare parts company Best Electronics flew over from America to give the French public a taster of its wares.

The Composcan France stand also included Compo Germany, Compo UK and ACN Holland who were selling everything from Neon Graphix, Arabesque 2 and Gemulator to Ethernet cards for the ST. They also had the entire *Atari World* collection for sale and many good deals on classic games.

Techno Service had huge stocks of games and accessories for the Lynx, Jaguar, ST and Falcon while Application Systems Paris were selling serious software such as MagicMac, Magic and NVDI translated into French. Ethilde showed a pre-release of version 4 of the acclaimed word processor Redacteur but it still doesn't use SpeedoGDOS.

Frontier Software and 16/32 Systems joined forces to present the biggest games stand while Logitron demonstrated Sheer Agony and Aazonakrypt for the first time, both of which are available in the UK from 16/32. The User Groups section was buzzing with activity too, each selling club magazines and telling users of their speciality areas.

Unfortunately the show was in the middle of the general strike that was bringing France to a halt, so many of the advertised companies did not turn up. Even the turnout of visitors was poor at around 1,500 for the two days. Oxo believe this is not an indication of the state of the Atari market and have promised to do another show this year.

Denesh Bhabuta

CODERS CONVENTION

At the end of December, people from all over Europe travelled to the Finnish capital, Helsinki, for the "Aggressive Party 2" coding convention. Many of the people attending had been chatting for some time over the Internet but had never actually met face to face, so this was an opportunity for a lot of them to finally meet and show off some of their latest demos and fancy programming effects.

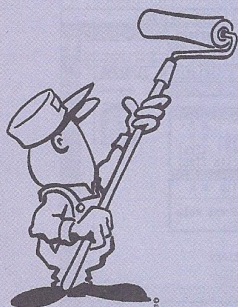
Around 160 people, many of whom also brought their computers, struggled to get some desk space in the venue. Even though this was a party for users of Ataris, Amigas and PCs, it's fair to say that it was the Atarians who were out in force. The party went on from noon on Thursday 28th December right through until Saturday evening – and many people didn't get any sleep in the duration! Those who could sleep did so wherever they could find room – in a small side room, in the corridor, or even under the desks!

Much of the time was spent putting final touches to their entries in readiness for the competitions on Friday night. There were five competitions in all – graphics, music, and three demo competitions (two of which had strict limits of the size of the demo).

The Atari scene fared the best, taking a total of six top 3 places in the three demo competitions, winning two of them outright. The entries in the graphics competition were outstanding, but many of the music entries were techno – full of bass which you couldn't escape even if you moved into the next room! Add to this the fact many people's stomachs weren't feeling too good after two days of junk food, you realise how uncomfortable some of the tunes were. For those with time to spare, there were also competitions on Aggression's forthcoming PC conversion of Utopos.

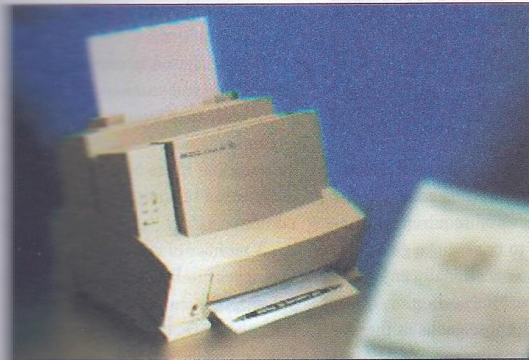
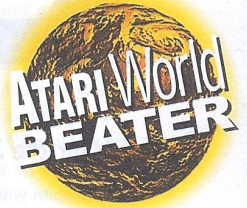
Many Atarians stayed on afterwards for a New Year's Party in Helsinki centre, taking the opportunity to enjoy a real Finnish sauna, a nightclub, and yet another dose of junk food. Here's one Atarian who'll never touch another burger again...

@name:Neil Jones-Rodway



Laserjet 5L

Until recently, inkjets were an automatic choice for quality printing on a budget. But now Hewlett-Packard has come up with the Laserjet 5L, and the issue is no longer so clearcut. Günter Minnerup weighs up the issues.



The new Laserjet 5L - printing power without the price.

Not so long ago, the only reasonable choice of printer for the average home computer user was between dot matrix and daisywheel – essentially a choice between graphics and text, as the pin matrices of the former could never make a decent job of fonts, while the latter were incapable of coping with graphics (and needed their character wheels changed when a different font was needed).

Laser printers existed but were definitely not for ordinary folk, at anything upwards of \$1,000 for the initial investment and then lots of regular bills for replacement toner cartridges and drums.

The breakthrough to quality printing for the masses came with inkjet printers, a revolutionary new technology pioneered by Hewlett-Packard. As the name suggests, the printhead consists of an array of very fine nozzles squirting droplets of inks onto the paper. As these nozzles were arranged in patterns similar to those of the dot matrix pins, inkjet printers were just as versatile for both text and graphics, but because the dots produced by them were so much smaller the results were a great deal better – almost laser quality, in fact.

Inkjets were also much quieter in use. No wonder then that once the HP Deskjet had fallen in price, it took the mass market by storm, and Hewlett-Packard soon found imitators among other

leading printing manufacturers. The addition of colour capabilities – up to a truly stunning level of near-photographic quality in some cases – has given inkjets a further boost.

Lasers

So why look further than an inkjet when thinking of a new printer? The answer is that laser printers still have certain significant advantages if you don't need colour – yes, there are colour lasers, but not at the budget end of the market. The quality, for example, is still markedly better: most people would be able to tell the difference between 300dpi inkjet and laser printouts with the naked eye.

The reason for this is that the wet inkjet droplets tend to get absorbed by the paper, making the print appear somewhat fuzzy (it can also smudge easily).

Laser printers are also faster, printing a whole page at one go, and usually a bit quieter – as well as cheaper to run. For those who need maximum quality – to produce camera-ready copy for desktop publishing, for example – or the ability to deal with a large output quickly and efficiently, lasers are still the preferred choice.

So what if we can't afford them, I hear you say. Well, you might reconsider when you take a look at the HP Laserjet 5L. With a street price of around £350 (plus VAT), it is still about £150 or so above the base model inkjets, but provided your bank balance will stand it, it could well be a better choice. As someone who has worked with a variety of laser printer

over the years, starting with Atari's own monstrous SLM804, I am well impressed with what Hewlett-Packard has packed into this little grey plastic marvel to make it compete with their own inkjets.

It has a tiny footprint, fitting onto even the most cluttered desk, offers different paper paths to cope with every conceivable medium from transparencies to fairly heavy cardboard, is as silent as a mouse and as simple in operation as a toaster. It only has one single button! It took me all of five minutes to unpack, assemble, connect it to my TT and print out a Papyrus page. It switches itself off after 15 minutes of inactivity, but remains in standby mode to respond instantly to any data transmitted down the standard Centronics cable.

Best of all, however, it is capable of a true 600dpi resolution and believe me, the difference is amazing! DTP jobs that could previously only be proofed on a 300dpi laser before being sent to an imagesetter may now well be "good enough" at twice that resolution, though you might prefer to stick with 300dpi for ordinary correspondence as the higher quality takes its toll in time.

To take advantage of the 600dpi output, your software needs an appropriate driver, of course: I had no problems with DA's Layout, Papyrus and Protect. For 300dpi, the common drivers for previous HP Deskjet models will do.

At the price, this is one hell of a good printer, a real breakthrough in price-performance, and highly recommended for top-drawer monochrome printing.

HP LASERJET 5L	
Manufacturer: Hewlett-Packard Contact: 01344 363344 Price: around £350 plus VAT Requirements: Any Atari	Pros: Outstanding quality • silent and smooth operation • good price Cons: No colour
SCORE: 9	



Letters

Justice for the Jag

In response to your reply to Edward Castle's letter (AW10), I would have to say that I think Edward is right. From the name of your magazine one would assume it was a publication in support of Atari, not specifically the ST range of home computers.

Personally a small section (even half a page) on a specific area of Atari (be it Jaguar, Falcon, Lynx, whatever) seems to be a good idea to me. One could argue that your Basic tutorial (and indeed GEM programming article) is such a specialised area, taking up two pages too! In addition the Bookworm section featured two reviews of books about music, not at all specific to Atari, let alone the ST computers. If they are then there certainly is no mention of that fact in the reviews.

This might sound a bit weak, as an argument, but personally I feel that Edward has a great knowledge of what he is talking about. I would suggest you ask your readers what they want, after all – they pay your wages. I think a quarter or half page section on consoles including the Lynx and the Jaguar would be fine. Goodness knows Atari don't support their products particularly well but when the magazines don't either – what chance do we Atari lovers have? I await your comments.

Martin Cubitt

There's nothing wrong with your comments as such but I object (mildly) to being told I don't listen. At last year's shows the majority of readers seemed to be against us expanding coverage of things like the Lynx and Jaguar. It wasn't an overwhelming majority, mind you, so we'll continue to cover mainstream Atari happenings and the better Jag reviews.

I'm not sure your point about the magazine's name is valid though. A name is only a name – whether we call it TOS Times, ST Monthly or Anything Atari, it's the

Right to reply
Put pen to paper and speak
your mind in *Atari World's*
letter pages...

direction that we all want to go that counts. If Atari calls a halt to Jaguar development and turns toward multi-platform software publishing (such as the PC and consoles), we'll still be here. But we'll be supporting you, not Atari.

Missing out?

Just a suggestion. Following the excellent AW show, I've been wondering about Mint, Minix, MintNet etc – along the lines of "Am I missing something important here?"

It's really something I know nothing about at all, but it seems to have a band of devoted followers on the 'Net who offer it up as the solution to almost every problem. Surely there's an article or two in this, if only to shed some light for those of us who are ignorant on this topic. What do you think?

Andrew Rose

For a starting point to a discussion, why not read Xav's article in this month's Atari Pro? If anyone wants to add to it, feel free to get in touch!

Nadgered dongles

Games on the Readers Disk? Sacrilege? A crime against humanity and the Atari Society as we know it? Shiver me disk drives and nadger me dongles, what are things coming to?

If a piece of software is good enough to be included on the readers disk and falls within the defined parameters, why should it not be included on the disk.

The disk is about software, and coupled with the magazine and the

user's machine, is viewed differently by different users who each have different needs and requirements.

I confess to not being a games lover, but I do occasionally enjoy the odd dragon bashing session or mixing it with those goons in the eastern theatre from my A64-H Apache assault weapon.

For many, their first introduction to a computer is through the use of games and, although some never progress further, other start to realise the full potential of the wonderful machine and the power that they have at their fingertips.

The Readers Disk needs to contain variety, and although retaining a theme, need not be totally serious all of the time, after all, most of us are big kids at heart and the odd bit of relaxation helps us old'uns to retain our perspective.

Great magazine, great disk, and if it's good software, keep bunging it on.

Kenneth Swan

A man after my own heart. Not too sure about having me dongles nadgered though – the vasectomy was bad enough...

New World

Well. It's taken a long time but finally I am tempted to put pen to paper and comment on some of your correspondent's correspondence. To launch a new specialised magazine into a declining and decidedly fickle market was a courageous act of faith and in my opinion, a successful one.

I have been an ST'er for some seven years now, having been a Dragon user for a number of years

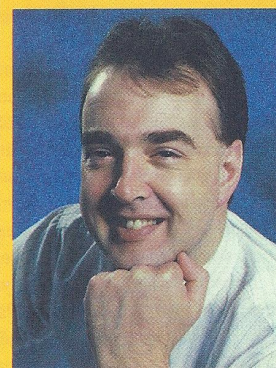
previous, and have subscribed to and read most of the periodicals published during that time. The original *World* was a particular favourite of mine and I am pleased to note that the new *World* is every bit as good.

Having chased around the newsagents and scanned the shelves in my time (and enjoying the excitement), I have found that subscription is the best way to ensure that I do not miss any editions.

A number of correspondents of late appear to believe that subscription is the last resort and infer that subscribers are a weird bunch. I would suggest that subscription should be the first choice. The second choice would be to have the local newsagent reserve a copy.

Had a few more people taken subscriptions/reservations a bit more seriously maybe support for the ST and its cousins would be stronger.

Write On...



Got something to say? Think I'm too grumpy? Or maybe too lenient? Hate the look on that smug, smarmy, self-satisfied face? Don't blame you. Write to me at Atari World, either at the address at the end of the magazine or via e-mail to andwright@cix.compulink.co.uk.

So, to Mr Hannis of Coventry and Mr Marriott of Workop, and anyone else who has not yet done so, subscribe now. Subscription does not make us all social lepers, but it does help to show commitment and, who knows, may prevent the disappearance of yet another fine magazine and machine.

As a final note congratulations on what is turning out to be a really excellent publication that is worth every penny and a worthy successor the old World.

Mr K Swan, Erith

Thank you, kind Sir. Your timely letter saved me laboriously typing out yet another appeal for subscriptions! Seriously it has to be up to individuals, of course. I've seen some caustic comments about the timing of the magazine. There's a small but vocal "I'll subscribe when it comes out on time" brigade out there just as there are plenty of well-meaning readers like yourself.

It's as well to make the point again, and you put your finger on it in your letter, and that is that none of us are getting rich from Atari World. Sales have settled to a point where we've felt able to take on a full-time staff writer, Kevin Beardsworth, but that doesn't mean we're raking it in.

Issues are late because some of the team have other commitments and livings to earn. The majority of the contributors do it for all kinds of reasons. Pay is just about adequate and almost always late, just like the issues themselves. They do it for enjoyment, duty, dedication and experience in varying measure. They all get something out of it, just as they put more into it than they're expected to. To turn round and tell everyone to get their act together or you won't subscribe is pretty petulant in my book. Atari users are few and far between now – I expect you, the readers, to play your part. For our part we'll do the same.

Anyway Mr Swan, I'm grateful – don't let my grumpiness spoil your glowing thoughts!

Here goes

You ask for correspondence well here goes. The season of good will is here but are you going to sort out the problems with your Reader Disks. I have had to return about half of mine and even one a second time. No its not my floppy drives, they can read all the floppies I have had from FaST Club under both TOS

1.0 and 2.06 without any problems. Floppies from ST Review and other Atari magazines don't give any problems either. Perhaps you should liaise with the other magazines to improve your disk copying, or of course change your readers disk comments to "In the likely event that a Reader Disk won't load..." and keep in with the trading standards people.

If that hasn't taken that self satisfied look away, then can you tell me why after all the articles on good DTP practice, Atari World still insists on printing black text of parts of some articles on dark background, it makes reading very difficult.

Next, avoid making personal attacks on your correspondence; it probably means you have lost the argument and/or overworked.

How can I get Timeworks to import Readme files without throwing away the CRLFs at the end of lines? I want the preserve the layout as appears on screen using the Atari 'Show' button.

Why is ST – guide so painful? It keeps freezing shortly after starting. Altering the INF making no difference, so I can't read the HYP file about itself.

Could some of your gurus provide some information on ESC/P2 printer commands as well as the Deskjet ones: particularly those related to Epson Stylus printers?

Please warn people about buying a hard disk. Its great but I found myself using the Atari so much more often and yes, I have been tempted and succumbed to upgrading to 4MB and TOS 2.06. Incidentally my hard disk was purchased from HiSoft and it was plug in and play with TOS 1.0. The upgrade was carried out by TUS.

I am not too worried about slight publication delays as long as quality is kept high.

PS Add my best wishes to those already sent to Vic Lennard and thanks of course for the Timeworks disks.

Anonymous

The writer isn't really anonymous – I just misplaced the letter after I typed it in. Sorry!

Anyway, yes we have had disk duplication problems but as far as we are aware (the returns rate is now very low) these have been largely resolved. We've decided to suspend experiments with dark backgrounds for the very same reasons you gave us. OK?

Yes, I'm overworked but I have to say that I won the argument to

my satisfaction. Perhaps not to the satisfaction of the twenty odd readers who wrote in telling me off but so what. He annoyed me.

It's possible that the Timeworks stripping CRLF may be because the ASCII files you are using have a space before the CRLF. There is a convention that CRLF after a space means that this is not a real CRLF – it is one that indicates a soft return – hence the CRLF is stripped to reflow the text correctly. Just a guess – anyone else have an answer?

Felicitations

First of all I want to apologise me for the broken English I use.

Secondly I wish you and the whole Atari World team a Merry Christmas and a Happy New Year.

Thirdly I want to felicitate you and all the contributors with this fine magazine. Month after month I see the magazine growing. It's now the best English-language magazine I know.

This is of course not the reason why I wrote this letter. I wrote this mainly because I found a little fault in one of the article in the January number. Rob Perry wrote in Techno-colour dreams that Oasis can't be used with graphics cards in colour. On my TT I use besides a TTM 195 also a 17" colour screen. In conjunction with the colour screen I use a Crazy Dots II graphic card. In fact I'm writing this mail now in colour mode. The resolution I use is 1024 by 768 with 256 colours. I must say Oasis works great in this resolution. It even works better in colour than on the monochrome TT high resolution. In TT high Oasis have some minor screen redraw problem.

Martin Byttebier, Belgium

Feel free to write in any time praising my magazine! And don't apologise for your English. You should see my Belgian sometime. Mind you I did visit the site of the battle of Waterloo last year – is that anywhere near you? Still, I won't go any further in case I annoy some French readers this time. I'm getting quite good at it. Anyway I'm glad to hear Oasis works for you – perhaps you were using different versions?

Format wars

Congratulations on an excellent magazine, which does prove that despite the rest of the computing world thinking Atari doesn't exist, there are people around dedicated to

Atari! The point of my letter to you concerns the Jaguar, a vastly underrated console in my estimation, but I feel this is due to a number of reasons.

a) This is a machine with 64-bit architecture (according to some sources) yet when games come out for it they do nothing to suggest that the machine is capable of 64-bit games. We have all drooled positively at Sega Rally, Daytona USA, Ridge Racer and friends on lesser(???) 32-bit CD systems so why are the games on a 64-bit machine looking like nothing more than ported 16-bit titles?

b) None of the high street computer chains support the system (well not in Aberdeen anyway), a problem which I also have to contend with for both my ST systems claiming that as one store put it to me "It isn't happening". Why not? If Atari would sort themselves out it could be "happening"

c) In a recent edition of an Atari mag, there was an insert telling us how wonderful the Jag is (I agree, AVP, Doom etc all back this up) and a list of developers for the platform, yet only a handful of these developers have actually produced the goods. Why?

d) Nintendo are currently running ads in all the mags stating "why buy a 32-bit slow CD system when the ULTRA 64 will be out mid-year?" Why are Atari retorting with a campaign like "Why wait for other 64 bit systems to come out when we have one already." They can't though because nobody is writing software to back up the system.

e) For a system so new it has taken an extraordinary amount of time for games to be released and now some good stuff has come the Jag way they stick a CD on top of it and the developers are now forgetting about the cart user and putting everything on CD. At least with a Playstation or Saturn you have to buy CDs but on the Jag we now have to buy an add on to get access to the good stuff.

Come on all you developers get your act sorted, there are a lot of Jag owners out there, check the Redsun.net pages on the Web if you need proof, write us some decent games so that we can show our Sega, Nintendo, Sony playing friends that the Jag is a serious contender and is just as good if not better.

PS What about more Jag coverage in the mag...?

Brian Paterson, Banchory

Letters

Presumably you're asking for my opinion so here goes! The reason so much Jag stuff is sub-standard? Poor programming – and the lack of help from Atari who charged several thousand pounds for the loan of a development kit, making it less likely that established programming teams would go for it. Now I know established teams are more likely to be able to pay but conversely, established teams can get free loan of Silicon Graphics workstations, Microsoft developer kits, and so on and so on. Why bother with Atari? I don't know why people aren't releasing the titles you speak of but it must be related.

The Jag is a minority console and it always will be now. According to Atari's press spokesman, Peter Walker, the proprietary console market is giving ground rapidly to the PC-based CD ROM games industry.

"Atari's strategy in 1996 is to stay with the Jaguar, offering the best games possible, and if it weathers the storm, by Christmas the company will have the best sub-\$100 console on the market," he said. "Don't forget we've got 40 plus decent titles on the Jaguar with some good ones on the way – Baldies, MBA Jam Tournament, Highlander, Flipout and Mutant Penguins, for example – so we're confident we can still hold our own."

Rumours are flying around about Atari turning its back on the hardware side and becoming a purely PC based developer. Most of these rumours were fuelled by the fact that after eight years as Atari's marketing guru, Darryl Still moved on for Electronic Arts, one of the big PC games houses. Oddly enough, it's the same company that once sold the likes of Fleet Street Publisher and Degas Elite on the ST but that's another story!

Incidentally, Atari's marketing strategies have often come under fire – not least from me – but Darryl spent a long time with his hands tied behind his back and it wasn't his fault. I wish him luck in his new job.

Your argument about having to buy a CD drive is a bit fatuous. You're seriously expecting a sub-£100 console to remain state of the art for years after its launch?

Try buying a decent PC or Mac game that's not on CD these days. No way.

I can't help thinking part of the problem is your competitive attitude really. Should Jag owners care whether the Sony Playstation or the Sega Saturn is better? It's the kind of yah boo sucks sort of approach that should be left in the school playground. I'm not attacking you (chorus of relief from the rest of the team) – we're all guilty of being a bit defensive of our chosen possessions at times, including me. It extends to cars and gardens and houses too, in case you hadn't noticed.

What we should care about is whether the machine will do the job. This is the whole point of today's ST scene too – we know that Atari STs all work, that they're reliable and that they can do 99% of the tasks they're asked. What more can we ask? They'll never be as fast as Pentium PCs or as well integrated as top end Macs but we don't care. We use 'em and that's that. The same should be true of the Jag.

That's my opinion anyway – I do appreciate you writing in with your views and rest assured we will continue to cover the Jaguar where we can.

I C

I read with interest a letter from Malcolm Lawrence titled 'Programming please!' (Atari World Issue 7). I too had great interest in the C tutorials in ST Review done by Jon Ellis which sadly died after January 1995 (ST Review that is, not Jon Ellis).

These tutorials were based on PROSPERO C which was on one of the ST Review cover disks. At the time Ofir Gal was producing tutorials with HiSoft Basic in ST Review, which I see have also been started in Atari World. Although Jon Ellis does a regular article titled 'Never mind the language', it does not cater for my somewhat novice skills in C. He is touching on a number of programming aspects including some typical C code but these are not complete programs and are therefore difficult for me to follow.

Would Atari World please start a C tutorial, preferably based on Lattice C, with maybe the differences highlighted for

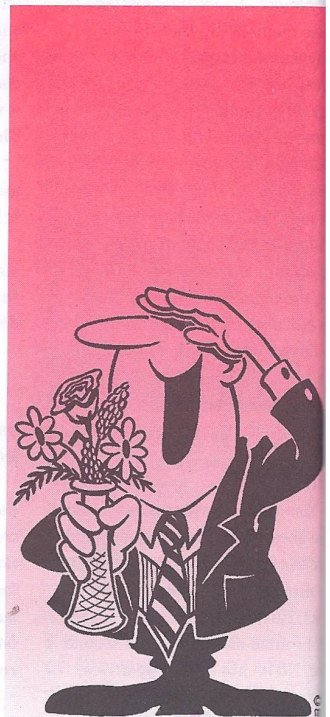
some other incarnations of C. I feel certain there are others who would be interested in such a tutorial.

Keep at the good work and may Atari World go from strength to strength.

Norman Bland, Four Ma

Your pleas haven't fallen on deaf ears and once we've finished with the series on BASIC a C series will be a high priority. Perhaps we might start even sooner, who knows? The trouble is we have to cater for all tastes. We also get pleas for assembler and STOS series – if we started them all we'd have to change our name to Atari Programming World!

Incidentally issue 12 will see the start of Tony Greenwood's new STC series, aimed at the intermediate to advanced user. We started that off because of the bulging mailbag – if anyone else wants a C series, why not write in?



Clubbin'

Deprived of regular chat about all things Atari? You could do worse than take Harry Sideras' advice and give the BBS networks a visit...

File	Block	Search	Window	Parameters	Extras
(F1) #M:AAUG:NESTBBS.TXT					
Confirmed List Of Atari-Supporting BBS Systems In The UK -- 22/01/96					
Name	Location	Sysop Name	Phone	Restricted Times	
AAUG	Hants	Colin Fisher-McAllum	01256 895186		
AAUG	Chester Le Street	Andy Curtis	0191 378 2659		
AAUG	Coventry	Anthony Lacey	01283 681448		
AAUG	Hate	Martin Stacey	01454 881895		
AAUG	Scotland	Kevin Norman	0131 556 9734		
AAUG	Carnforth	Daniel Horne	01524 732957	9pm-midnight	
AAUG	Sagenham	Mark Atkinson	0181 596 8845		
AAUG	Registon	Neil Burton	01763 238843		
AAUG	Cardiff	David J. Thomas	01222 689812		
AAUG	Prestatun	Peter Carr	01745 853583	9pm-8am	
AAUG	Doncaster	John Richardson	01382 744241	10pm-8am	
AAUG	Ipswich	Mark Clark	01473 692882		
AAUG	Folkestone	Robert Darling	01383 249386		
AAUG	Plumstead	Kevin Osborne	0181 244 9825		
AAUG	Borchester	Tim Putnam	01385 266384		
AAUG	Derby	Keith Jackson	01332 662988 (num changing)		
AAUG	Birmingham	Mick Coleman	0121 438 3761		
AAUG	Kidderminster	Andy Taylor	01562 743661		
AAUG	Lytham	Paul Seed	01253 344819	6pm-9am	
AAUG	London	Paul Baker	0181 445 6514		

The AAUG disk contains lists of all Atari related services.

On the NeST

How many people do you speak to about your ST or Falcon each day? Personally I'd say around 50! The way I do it is by using a modem and logging on to the private BBS networks.

Let's get one thing straight before we start. If you have a mental impression of comms leading onto enormous phone bills, monthly charges to service providers, large software registration fees and the like, then you're seriously out of date with the situation today.

In earlier years when we had slow modems, non-networked BBSs and online message writing, this situation was quite possible. Nowadays message areas are networked across all BBSs. Modems give you the maximum speed with an ST and are available at a realistic price from Atari vendors complete with cables and software. There are terminal programs with scripting facilities, like Teddy Term from AW9's reader disk, that allow you to collect your messages in the minimum time, and off-line readers, like Kivi-QWK from the AW3 reader disk, that let you read and respond to messages without BT's profits rising by the second.

What I'm saying is that after you've got a modem it's quite possible to call a BBS once a day, every day, and the difference to your phone bill might be as little as a tenner a quarter - no hidden extras!

What do I get?

There are several BBS networks in operation. The biggest is Network ST (NeST), but others like TurboNet, AtariNet and FishNet may also be available at the BBS you select. Within these networks there are different message areas covering DTP, comms, the Falcon, fax, games, graphics, PD reviews and many others. Any question you send into each area will be sent onto all the other BBS's within the network for answering.

Each BBS has file areas which are also networked so new software will arrive at your BBS before long. The Sysop of some boards may also have a CD ROM connected for you to access the massive PD collections available on CD.

Some BBSs also provide a very limited access to Internet message areas and anyone can get Internet email through the NeST gateway.

What you don't get compared to CIX and the Internet is the immediacy of your messages getting around the world or access to the Web. All Sysops are users like you and me and provide their services on a free basis to their callers, so despite the limitations it's still quite a good deal.

BBS networks are a form of user group in their own right. Even though you may not get someone demonstrating software right in front of you, you get a range of skills and experience that you'd be unlikely to find at any monthly meeting.

If you've held back from joining the comms bandwagon for fear of the costs there's no better way to start your learning curve than at a BBS which has an Atari-using Sysop who can help with the first step. In future issues I'll be looking at the software needed to get you going.

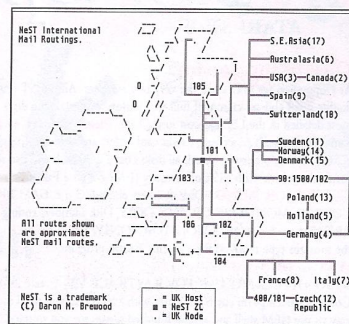
Making contact

Check the screenshot for your nearest BBS. Once you've linked in new users should post a message into the N.ST.USERS area for advice about how to get the most from your comms.

Clubbin'

Toward the end of last year Ken Ward announced that he was ending his involvement with the Association of Atari User Groups, which I covered in AW1. This followed 15 years of involvement on behalf of Atari 8-bit, ST and Falcon owners and user groups. Quite how much it was appreciated I didn't realise until I'd got Ken's consent to take over the AAUG myself and relaunch it within the UK from the beginning of this year. Apparently these are big boots I've got to fill!

The primary purpose of the new UK Association of Atari User Groups is to maintain a directory of user groups and their contact details in order to enable



The NeST network gets your messages around the world.

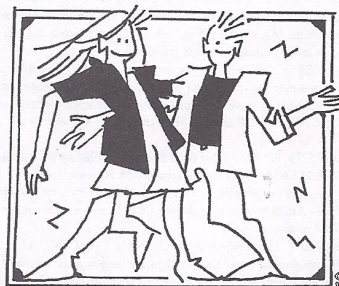
individuals to join an existing network of support. Advice and encouragement is also available on creating new groups in areas where it doesn't currently exist.

It will continue to operate on a non-profit making basis, so all postal contact requiring a response must be accompanied by a disk and SAE. The directory will contain information on groups that support Atari software, Atari publications (both printed and on disk), PD libraries and Atari BBSs, FTP and WEB sites. There will also be some text files on the disk of especial interest to newer users. Other useful listings may be included in the future.

To this end I would ask that all organisations that need to be listed in these directories, that haven't already been contacted directly, confirm their current contact details as soon as possible to ensure they are included within my provisional lists.

Making contact

UK Association of Atari User Groups
49 Haywood Road
Tile Cross
Birmingham
B33 0LJ
(Please remember the SAE and disk)



Feedback

Feedback is always welcome, either at the magazine address or via email to sidcelery@cix.compulink.co.uk. Online, you can join the support echos N.SUP.ATARI_WORLD and N.ST.USERS at any NeST BBS or on CIX join the atari.world conference.



ATARI ST/E

Floppyshop

DEPT. AW10, PO BOX 273,
ABERDEEN, AB9 8SJ

Partners: Steve Delaney & Irene Lamb



FALCON

Quality and Service

At Floppyshop we only stock the very best software. All our ST disks are double sided and are crammed full! In addition, our catalogue disks are the most detailed in the UK and cost just £1.00. **Please state ST or Falcon.** Same day despatch on orders. Credit card orders are welcome (minimum value £2.00). Unless otherwise stated, all disks cost £2.00 each and run on a standard machine with 512k of memory (1 Meg if it's a Falcon) upwards. **COLOUR OR MONO** - Disk numbers ending 'C' i.e. GAM.10C are for COLOUR MONITORS OR TV'S ONLY. Disk numbers ending 'M' eg. ART.63M are for MONO MONITORS ONLY. **RGB or VGA** - Indicates the monitor type required for a specific Falcon program.

ART & GRAPHICS

S-ART.4514 to S-ART.4516 POV RAYTRACE V2 - Create 24-bit True Colour raytracing on any ST. Comes with everything you need including an easy to use GEM shell and several hundred scenes for you to trace. Three disk set, £5.25 for set.

ART.4774C STEREO IMAGE SYSTEM (STIS) v2.0 - Creates 3D images from True/Prism Paint pictures. These can be viewed without special glasses.

ART.5011C SPECTRA - Displays True Colour images using 64 greyscales on an STE or 32 on an STFM. You can lighten, darken, dither, enlarge, reduce or negate your picture and carry out individual pixel editing in zoom mode.

ART.5276C THE FRACTAL ENGINE v2.1 - Supports all sets including Mandelbrot, Julia and Barnsley. It can even create fractal animations. Fractal popcorn, mountains, plasma clouds and fractal landscapes are all possible! S-ART.5458 & S-ART.5459 POWSTUFF VOLUME 1 - 25 raytracing scripts for you to render using POV Raytrace v2 (S-ART.4514 to S-ART.4516). Two disk set, £3.50.

ART.5471M MPEG FEVER - Utilities for analysing/creating/de-merging MPEG animations. Hard drive and lots of memory recommended! Mono only.

COMMUNICATIONS

COM.5249 OASIS V1.35E - A GEM based front end for accessing the Internet on your Atari. Oasis lets you log on and off with the minimum of hassle and includes built-in offline mail/newsreader software. Needs 1 Mb and a hard drive.

COM.5313 WWW 1.15 - Suite of three programs which allows Atari users to access the World Wide Web. Includes a full graphic browser. Needs 1 Mb and a hard drive.

COM.5314 STARCALL v1.9 - Integrated comms package with terminal emulator, bulletin board and fax software. Supports most file transfer protocols and terminal emulations. Includes fax drivers for 1st Word and Calamus. Needs a hard drive.

S-COM.5448M to S-COM.5454M CHIMERA and X-WINDOWS - Everything you need to turn your ST into a UNIX workstation for accessing the World Wide Web. Needs 4Mb of RAM and 10 Mb of hard drive space. Mono only. On 7 disks, £12.25.

FONTS

FNT.03M 54 GDOS fonts for use with mono monitors and 24-pin (or bubblejet) printers. Includes instructions for setting up with Timeworks and WordUp.

FNT.19 53 DEGAS ELITE fonts.

FNT.32M, FNT.33M, FNT.34M, FNT.35M 64 GDOS fonts for use with mono monitors and 24-pin (or bubblejet) printers. Can be used in Timeworks, Easy Text, Easy Text Pro and many other applications. 4 disks, £2 per disk. FNT.3183, FNT.3184 45 PAGESTREAM fonts on two disks. £2 per disk. FNT.3639 22 DELUXE PAINT fonts.

FNT.5186 to FNT.5198 TRUE TYPE FONTS for use with SpeedoGDOS 5 or NVDI 3. Over 220 fonts spread over 13 disks, £22.75 set!

CALAMUS **OldWare Fonts** - A collection of over 240 semi-professional Calamus fonts spread across 16 disks. Far superior quality to the usual PD Calamus fonts. Very highly recommended. Just 28 for the entire set!

GAMES

GAM.5279C HERO - This highly acclaimed 'Impossible Mission' has been re-released as Freeware. Brilliant platform game for all the family. Needs 1 Mb

GAM.5444C ATARI BINGO - Enjoy a game of Bingo against your ST. Features clearly sampled speech and a number of game options. RACE V2 - A board game where you gamble en route in order to progress to higher levels.

GAM.5318C LETTRIS - This adaptation of Tetris uses letters rather than blocks and you eliminate rows and columns by making up words. The longer the word, the more points you get. Improve your spelling and have fun too!

GAM.5434C MAGIC TOMB - You assume the role of a spaceman sent to explore the Magic Tombs. Your colleagues have perished and you are trapped in the tombs. Combines arcade action and strategy into a compelling game.

GAM.5476C VIDIGRID - Re-arrange the pieces of a jumbled up picture so as to re-create the original. It's not as easy as you'd think, especially since you are dealing with moving pictures! 4 pictures per level, multiple levels.

GAM.5477C VIDIGRID2 - More of the same but with 14 pictures per level.

PROGRAMMING

LAN.5275 FFLIB20 - Bug fixed floating point library for Sozobon C. GFA PATCH V0.98 - Fixes bugs in certain GFA Basic commands. ST PROFILER - Monitors any program, analysing time taken by each routine. SHOWMSG V2.0 - Aid to debugging applications which send/receive messages via the GEM message pipe.

LAN.5334. THE PROGRAMMERS' INTRO TO DEMO TECHNIQUES - An introduction to the tricks of the trade used in demo coding. Aimed squarely at experienced 68000 assembly language coders. You will need a good assembler (eg Devpac), 2 Mb and a hard drive (or RAM disk).

LAN.5366 LIBRARY CREATOR V1.0 - Combines multiple files (up to 200) into a library file. Includes GFA source for calling the files within the library.

STOS EXTENSION SELECTOR V2 - Turns STOS extensions on/off prior to loading STOS Basic. JDEB - Source level debugger for Lattice C. STOS MAPPER V1.1 - The most full featured map editor available.

DMG.5373C SteStosTerone Issue 3 - The diskmag for STE STOS programmers. This issue has two tutorials on the Control extension and a piece on creating sample banks for use in STE games as its highlights. Lots of other features too.

DMG.5427C SteStosTerone Issue 4 - Main features include another Control extension tutorial (full extension on disk!), some tracker secrets and displaying more colours on screen. And much more...

UTILITIES

We have thousands of utility programs spread over several hundred disks. A full description of every program is given in our catalogue.

UTL.5426 S3-ST V2.00 - Link up a Psion Series 3 organiser to your ST and transfer and/or edit files on either machine. RESISTOR - Works out the resistance and percentage tolerance of any resistor from their colour codes. TB C - A collection of Desktop backgrounds for use with replacement Desktops. UTL.5431 MISCELLANEOUS UTILITIES - The programs on this disk let you format HD disks, password protect your ST, call up the file selector, add font names to EXTENDSYS, convert Windows icons to RSC format, change program header flags, connect an Atari 8-bit drive to your ST, create your own Epson Stylus GDOS driver, switch on/off SpeedoGDOS/True Type fonts and much more...

UTL.5338 JUNIOR OFFICE V3.04 - The English version of this popular easy to use fax software. It lets you combine your own images and text to create your faxes and can be set to auto receive when running as an ACC or under multi-tasking systems. Needs 1 Mb and a hard drive.

UTL.5465 ANTIDOTE - One of the best virus killers, it destroys 64 bootsector viruses, 5 link viruses and does lots more besides. Other useful programs on disk.

S-UTL.5466 & S-UTL.5467 UDO V4 - Rather than write on-line help files for thevarious systems, write all documentation using the UDO syntax, then use this useful utility to automatically convert it to ST-Guide, HTML, ManualPage, LaTeX, Pure-C Help, WinHelp or RTE. Two disk set, £3.50.

Other Products Available

DegasArt Parts 1, 2 & 3

The highly acclaimed three disk graphics tutorial package has been upgraded to v3. Well written, easy to follow tutorials combine with 120 quality illustrations giving you a step by step guide to creating your own masterpieces on your ST. As well as delving into every significant feature of Degas Elite, DegasArt takes you through the basics of reproducing artwork on a computer and guides you through the 'tricks of the trade'. As most of the tutorials discuss general graphic techniques, these can be equally well put into practice with EZ Art Professional, True Paint, Pixart, Canvas, Deluxe Paint, Flair Paint, Cyber Paint or indeed any other ST graphics package, including the vast range of titles available in the Public Domain. If you want to learn to draw and paint on your ST (or improve your existing skills), DegasArt 3 simply cannot be beaten.

DegasArt 1, 2 & 3 come together as a three disk set for the incredibly low price of just £12.00 + P&P (UK free, Europe £1.50, rest of world £3.00). Existing users of DegasArt parts 1 & 2 can order part 3 on its own for just £5.00 + P&P (UK free, Europe £1.00, rest of world £2.00).

Easy Stitch

Easy Stitch is a cross stitch pattern generator. It lets you to convert graphic files into cross stitch patterns or create your own on a grid on screen. This computer based variation stands head and shoulders above the traditional graph paper method as it allows blocks of stitches to be copied, rotated, enlarged or reduced to suit. In fact you can even edit the individual stitches. Patterns up to 10 feet by 8 feet can be created easily on your ST and printout is supported to most common dot matrix and laser printer types. Easy Stitch is the leader in its field, being the only cross stitch package to support the creation of the more complicated back stitch and half stitch. An ideal present, at the low price of just £19.95 + P&P (UK free, Europe £1.50, rest of world £3.00).

Easy Text Pro Vector

At last, quality Desktop Publishing is within everyone's grasp with the highly polished, yet budget priced Easy Text Pro Vector. Create your own leaflets, brochures, newsletters and business stationery easily with this well documented, easy to use package. This version makes full use of the increased flexibility offered by SpeedoGDOS and NVDI 3, giving crisp, clear output on all types of printer. Now available at the 'silly' price of just £19.95 + P&P (UK free, Europe £2.00, rest of world £5.00). Can you really afford to be without this product? Easy Text Pro Vector needs 2 Mb of memory and a hard drive or 2.5 Mb if you don't have a hard drive. SpeedoGDOS 4 (or later) or NVDI 3 are also required.

Easy Text Pro

This is Easy Text Pro Vector's 'little brother' with most of the functionality of Pro Vector but tailor made for users who do not have SpeedoGDOS or NVDI 3, and are short of memory. It runs on a basic 1 Mb ST and does not require a hard drive (although we do recommend that you have one). Easy Text Pro is also available for just £19.95 + P&P (UK free, Europe £2.00, rest of world £5.00).

OMEN Multi-Tasking Operating System

Designed as a cross platform operating system, programs written for OMEN on the Atari will run without modification on a PC, Mac or Amiga running OMEN. OMEN completely replaces TOS and GEM, providing a fast, compact (in terms of memory usage) true pre-emptive multi-tasking OS. This full version offers lots of extras over the Shareware version and is only available from Floppyshop in the UK. The OMEN operating system costs £23.50 + P&P (UK free, Europe £2.00, rest of world £4.00). Please note that OMEN does not run TOS or GEM programs directly, although their source code is easily adapted if you have the OMEN Developers Kit.

OMEN Operating System and Developers Kit

The full developers' kit including the massive programmers' reference guide on disk. The five disk package includes a 68000 assembler, disassembler/debugger, Forth assembler and a C compiler. The OMEN Developers Kit has deliberately been priced low, so as to bring aspiring new programmers into the fold and now includes the full registered version of the OMEN Operating System (as above). The combined OMEN Operating System & OMEN Developers Kit costs £32.00 + P&P (UK free, Europe £3.00, rest of world £5.00).

EZ-Art Professional v1

This is a well documented, easy to use graphics package which is simply crammed with features. Over 20 different types of shapes are supported and over 20 different effects can be applied to blocks. EZ-Art Pro is STE enhanced, making full use of the extended colour palette. There's a builtin colour fill designer, support for up to ten workscreens and almost 20 drawing tools and modes. What's more, the package runs on a 520! Ratings: ST Review 90%, ST Format 83% and voted Graphics Package of 1994 by ST Review readers. Now available for just £19.95 + P&P (UK free, Europe £3.00, rest of world £5.00).

PAYMENT DETAILS:- All prices include postage in the UK. Overseas orders welcome. Please add £1 per order for Europe and 10% of order value (£2 minimum) Rest of World. Overseas customers please note - We can only accept payment by credit card or in UK currency (cheque drawn on a British bank is recommended). Cheques should be made out to FLOPPYSHOP

FALCON 030 SECTION

We were the first to support the Falcon and now have over 600 HD in our library. The Falcon catalogue costs just 1. Falcon disks cost 2.00 otherwise stated. Please note that the disks in this section will NOT ST or STE.

ART & GRAPHICS

E3933 KANDINSKY V1.731 & 2.00 - The leading object orientes package now with support for colour vector graphics.

E5470 MPEG FEVER V1.0 - Analyse, create, de-merge or view M movies on your TT or Falcon with these special 68030/68882 version software.

E5474 FASTER THAN POV V2.1 - Highly optimised version of Raytrace v2.1. Includes programs to convert CAD 3D/2/Cyberculp Studio files into POV format. GIF2FLI - Creates an FLI/FLC animu a series of GIFs.

DEMOS

F4573 THE DEMENTIA DEMO by Avena - One of the better F. demos features True Colour plasma effects, 3D wireframe graphics, 'journey' to the centre of a keffale and 3D texture mapped objects. I ONLY, needs 4 Meg.

S-F4669 & S-F4670 AUTOWASCHEN VERBODEN by Lazer - intro and about a dozen different parts to the demo, all of which are presented. Worth getting just for the morphing sequence at the end! ONLY, Needs 4 Meg and a hard drive. Two disk set, £3.50.

E5347 MOUNTAIN SPEEDER by Cruor - A zooming demo bas picturesque mountainous landscape. Zooms in and out, focusing on points in the demo. A great MOD accompanies the demo. RGB O 4 Mb.

E5461 REALM OF DEPTH by Hydroxid - Yet another of those F entries. This one uses quite a number of effects and several excellent drawn and raytraced scenes. RGB Only, Needs 4 Mb.

S-E5462 & S-E5463 EVOLUTION by EXA - Their entry into the 95 competition. Superb music and original graphic scenes along wit special effects inc. gourad shading and a 4D optical illusion. RGB O 4 Mb and a hard drive. Two disk set £3.50.

GAMES

E3892 NETHACK GEM v3.13 Rev D - The GEM based version of ular Unix based Dungeons and Dragons type game of the same name Mb.

F4399 A collection of card games. Includes 4-7-11, Cribbage, Euch Harle, Lucie, Patience, Draw Poker, Klondike, Vegas and Vidi Poker. F4781 SHOCKER 2 - THE HOUSE OF GAMES - Addictive puz game for one or two players. Each level has new challenges and r ferent skills.

E5302 DOMINOES - A sliding puzzle game. MEMORY - A mem where you try to match pairs of symbols. TAROT - A card game pla two computer players. VROOM - A fast action driving game. RGB Needs 4 Mb.

E5354 EPI-LEPSIE DEMO by Parx Software - You control a 'smile must hop on to every unlocked square on each level in order to con level. Just to complicate things, you have a timer to beat! Needs 4 Ml hard drive.

F5475 STELLO 2 - Falcon/TT version of the board game Othello. MIDI WIZ - A trading/conquest game which can be played by sever linking up via MIDI. FALCTRIS - A great Tetris clone in 65536 col of user configurable options and several custom designed levels to add fun.

PROGRAMMING

F5152 SOZOBONX - An eXtended version of the Alycon C comp Sozobon Cv2.00. This latest version supports profiling, pre-compiling an in-built source level debugger and code optimiser.

F5269 PNG - The full C sources and accompanying documentation Portable Network Graphics (PNG) format, the replacement for GIF T MINT PROGRAMMERS GUIDE - ST Guide hypertext file of the MiNT documentation by Eric Smith. JDEB - Source level debugger C.

F5307 STOS BASIC FALCON SUPPORT DISK - Extensions whi STOS compatible with the Falcon and add support for the Falcon's h Includes support for gourad shading, virtual screens, 256 colour resol direct to disk recording, True Colour fades, GDOS fonts and 50Khz t sample replay.

F5408 WOLFENSTEIN 3D - The complete source code (C and as Wolfenstein 3D, the predecessor to Doom. Could be converted to GT with a

bit of work! HBMODLIB - Library file for HiSoft Basic 2 which allo play MOD files under interrupt using the DSP.

UTILITIES

F4351 THE ARCHIVERS COLLECTION - All the popular archi programs on onedisk. Includes Arc, LHARC, LHA, Zoo, ST Zip, LZH Split, ST Unarj, EssCode and Magic Shadow Archiver. A few archiv are also on disk.

F4451 MAUS WINDOW - Tops window under the mouse cursor. N KA MANIA II - Replaces mouse pointer with an alternative of your MULTIBLOW - Extends overscan to squeeze more onto the screen. I Only. XLATOR V2.04 - Full version of a leading German to English translation program.

F4727 HP LASERJET 4L CONTROLLER - Sets up font to use, n copies, lines per page, landscape or portrait, automatic/manual feed, 8 sizes, economy mode on/off, toner intensity and international charact from software!

F4863 HP DESK/LASERJET SUPPORT DISK - A massive collecti printer drivers and other utilities for the HP Deskjet and Laserjet serie printers.

E5348 JUNIOR OFFICE V3.04 - Top quality fax software. Needs h S3-ST V2.00 - Link up a Psion Series 3 organiser to your Falcon and and/or edit files on either machine. SUPERCARD 3.13 - The popul filing package. PARAFIN V1.37 - File finder program which runs in t ground.

E5464 CLICK RUN 1.2 - One of the best program launchers around Programs are represented as icons, just like on the Desktop! PROGNI CPX for changing program header flags. UDO V4 - Converts UDO files to ST-Guide, HTML, ManualPage, LaTeX, Pure-WinHelp or RTE.



Floppyshop

Credit Card Line Tel/Fax 01224 312756, General Office Tel/Fax 01224 586208

http://exxos.www.idnet.com/IMPULSE/atari/last/

Reader Disk

Joe Connor brings you details of what's on this month's reader disk.

Credit card
order hotline:
01487 773543

The optional reader disk supports the software covered in the magazine and creates a link between the reader and the software authors. *Atari World* supports and encourages authors - in return you can do your bit by supporting them. The *Atari World* team is in constant contact with the best Atari programmers around - we keep your finger on the pulse and obtain the very latest versions, often exclusive to *Atari World*!

A single reader disk costs £2.50 inclusive of post and packing - around the same price as a typical PD disk. Some issues offer two or more reader disks with each additional disk costing £1. For example, an issue with two disks would cost £3.50 inclusive of post and packing. So the choice is yours but don't forget subscribers get all additional disks absolutely free! Check out the special subscriber deals on pages 56 and 57.

As usual everything on this month's reader disk has been covered inside the magazine. To make it easy to back up your reader disks a copy of AWBAKUP.TOS, specially programmed by Ofir Gal, is included each month. Simply run AWBAKUP.TOS and follow the on-screen instructions; the program even formats the disk for you. We recommend you always store your original disks in a safe place and don't use AWBAKUP.TOS for any other purpose.

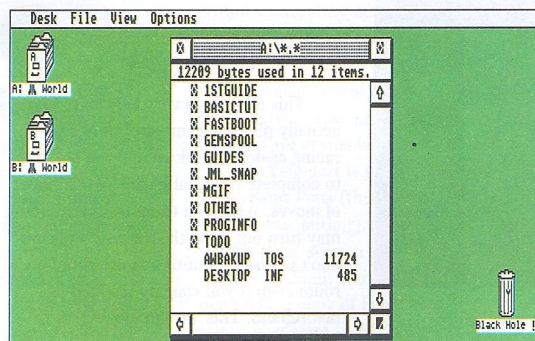
What's on the disk?

1st-Guide 01-96

Atari World Exclusive • Shareware • Guido Vollbeding

Excellent GEM based file viewer which runs on all TOS compatible machines. Can be installed as a desktop accessory or run from the desktop. Supports a wide range of image, audio, resource and text files.

**SEE PAGES 90-91
FOR ORDERING
INFORMATION AND
BACK ISSUES**



FastBoot 030 v0.5 Beta

Freeware • Tommy Jonaeson

Falcon owners without internal IDE drives can use FastBoot to create a boot floppy which bypasses the memory test and internal IDE boot sequence reducing the boot sequence to a few seconds.

Gemspooler 4.0.12 Beta

Atari World Exclusive • Shareware • Steven Van Rossen

GEM Spooler is unique on the Atari platform because it stores spooled files on disk instead of in memory - which means the memory is available for applications to use. Includes ST-Guide hypertext and ASCII documentation.

JML-Snapshot v3.0

Shareware • John McLoud

Bilingual (German/English) snapshot utility. Grab entire screens or rubbed banded areas in IMG format. The registered version can additionally grab in TIFF or IFF format and snap individual windows.

MGIF v5.0

Atari World Exclusive • Shareware • Johan Klockars

Fast GEM based GIF file viewer which also supports the JPG, TGA, PPM and (X)IMG formats. Includes image processing and scripting features.

ProgInfo CPX

Chris Ridd

CPX designed to check and modify program flags. If you're running MultiTOS, MiNT or using alternative RAM ProgInfo provides a convenient way to maintain your program flags.

ToDo v1.01e

Atari World Exclusive • Shareware • Reiner Rosin

First English release of this electronic notepad with simple 'project management' aspirations. Can be installed as a desktop accessory or run from the desktop. Output via the printer or to the GEM Clipboard. Includes ST-Guide hypertext documentation.

HiSoft BASIC listings

Atari World Exclusive • Ofir Gal

HiSoft BASIC listings to accompany Ofir's tutorials.

Reader Disk problems

In the unlikely event that a reader disk won't load or gives you any other problems, disconnect all peripherals, switch off your computer for at least 20 seconds and try again. If this doesn't solve the problem, return the disk to the *Atari World* disk sales address clearly labelled *Atari World* faulty disk and enclose a self addressed envelope. Your disk will be tested and replaced or returned as quickly as possible.

Should you require technical help, call the *Atari World* disk helpline on Wednesday evening between 7pm and 9.30pm on 01206 852602 or leave a message on the answer phone outside these hours.

Atari World Profile

Exclusive • Joe Co. *Atari World*'s own database for issue nine in ST-Guide format. Added to the files included in previous issues the database now covers the first nine issues. You may prefer to create a separate database disk which can easily be extended each month, to do this:

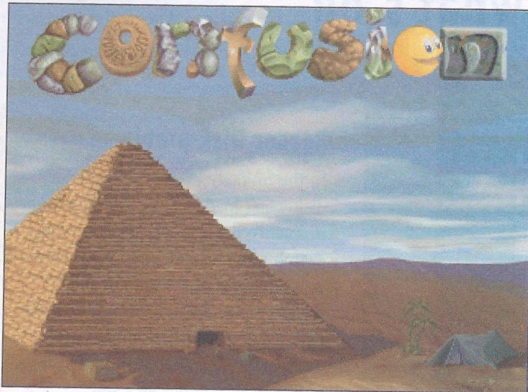
Use AWBAKUP.TOS to make a copy of the reader disk.

On the copy delete everything apart from the GUIDES folder.

Each month copy the contents of the latest reader disk GUIDES folder to the GUIDES folder on your database disk - some files will be overwritten each month, this is normal.

Optionally add a copy of ST-GUIDE.ACC and ST-GUIDE.INF to create a stand alone database boot disk.

Confusion say...



Artwork in Confusion is colourful and bright.



Choose from a huge selection of music to play during the game.

Picture the scene. You're searching for the entrance to an unexplored pyramid. Having sweated through countless days, any hope of finding it is fading fast. One night you accidentally stumble across the entrance and decide to explore further in the morning – except that you're awakened by a mysterious voice commanding you to enter the pyramid and you obey as if you were hypnotised. Snapping out of the trance you find yourself in an Egyptian labyrinth. The world has turned a full 180 degrees. Now you must find the entrance to get out! And the only way out is to conquer what lies ahead...

I must say that I agree with Graeme's statements in his Platonix review in issue 10. Do games players really need these short stories to get into a game? I haven't played many games since my Spectrum owning days and stories such as these were around even then on the inside cover of a cassette box.

So what mysterious game does this mystical Egyptian story lead us in to? Put simply, it's Sokoban, that classic game from the 8-bit computing era. Many of the latest Falcon game releases have been conversions of old 8-bit favourites and why not? Those games were playable even without the sound and graphics capabilities that machines have today. Confusion brings back that playability and adds some good quality graphics and superb sound to the whole thing.

The object is to get through each level by pushing blue crystals around the maze, slotting them into small platforms to activate them. Various objects and walls hinder your progress while some objects can actually help you. Filling all the platforms with the crystals takes you onto the next level.

Denesh Bhabuta walks like an Egyptian in the brain-busting land of confusion

Hi ho, Hi ho

This all sounds very easy until you actually play the game. Not only are you racing against the clock but you also have to complete the level in the least number of moves. What you think is an easy route may turn out to be the hardest one. You don't realise this until you are actually en route even if you roughly planned it beforehand. This 'on the job' aspect is what makes Confusion so playable.

Make one mistake and you are back to the beginning of the level: and making mistakes in this game is too damned easy. A lot of the moves are similar in some of the levels. This makes you relax a bit in controlling the character and you can push the crystal one slot too far all too easily. Frustrating, but I could not resist that one more try.

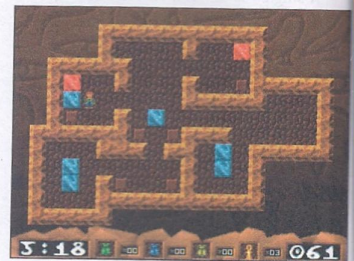
There are over 100 levels in Confusion each with varying stages of complexity. Each level has a codeword linked to it, so even if you don't finish the game in one go you can go back to carry on at a later time.

The game comes on three high density disks in very nice packaging which was nice to see compared to other recent releases that come badly fitted inside a video cassette box. The 42 page multi-lingual manual is nicely laid out too. Familiar names from the ST and Falcon demo coding teams make an appearance in the manual: the soundtracker MOD music and artwork is what you would normally expect from a demo.

A couple of errors did creep in as the manual goes on about an install program on disk 1. I spent the first few minutes trying to locate this on all the disks to no avail. Instead I created a directory for the game on my hard disk and plonked the



The aim is to move those blue square object in to the red slots around the game screen.



... but make one false move and you're stuck for eternity.

contents of all three in there. Once you start the game you are asked to choose one of French, English or German as the language. Then it asks you for the password (random words from different parts of the manual). This is all fine except I don't like passwords that much – I'd rather click on the icon and be part of the game instantly.

As it is a Falcon game, it works in VGA or RGB modes. Controlling the character is via keyboard, joystick or even the Jaguar joystick. Graphics are bright, sound is excellent and it is all very playable. I like this simple puzzle game a lot and highly recommend it. Right, now that this review is over, I'm off to the land of Confusion...

CONFUSION



Publisher: WBW Game Line UK Distribution: 16/32 Systems Price: £24	Requirements: 4Mb Falcon030, hard drive Pros: Heavily addictive and playable • excellent presentation Cons: Odd errors in the manual
---	---



SCORE: 8

[illegible]

STREET CARTOON

C) IECB

Développé par
Cécile BOIS-ANGEL

Vigne

Fishes

L'important Point de
vue de P.

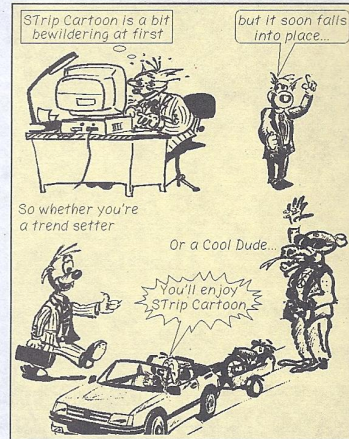
Ok ?

Mais...

Fishes

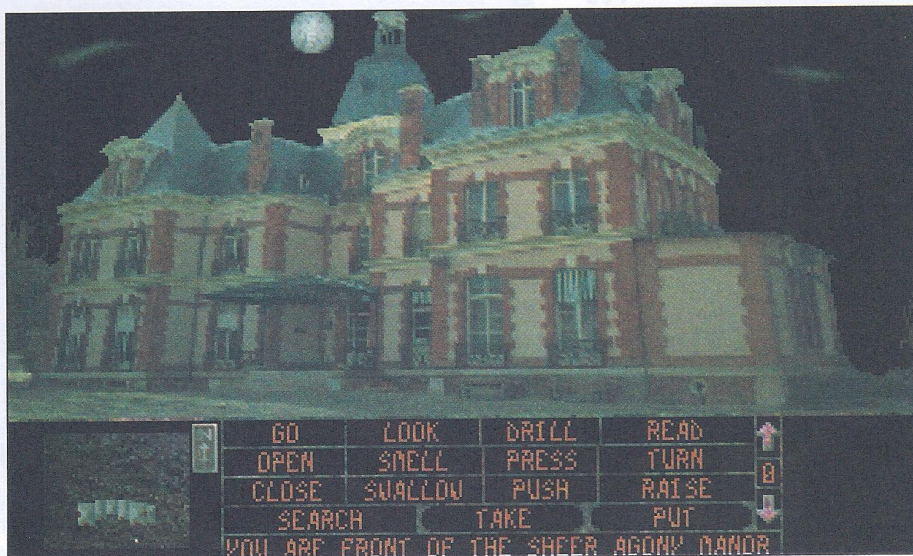
Rompez !

Niveau : activité intermédiaire

March 1996 **ATARI** World 17

Sheer Agony

Graeme Rutt enters the Kruwehl Manor – I ask you!



The antidote to the poison pulsing through your veins is here somewhere!

These Falcon games, huh? I'm loathe to dredge up old clichés (it's never stopped you before – Ed) but they're like buses. You wait forever and they all arrive at once. This one – Sheer Agony – is from some French geezers calling themselves 'Logitron' and is a graphical adventure caper around a manor house.

You play a journalist who wrote an article about the latest owner of the house, one Kale Kruwehl, and like all others who've dared declare an interest in the Kruwehls you're now dying of some mysterious poison. Fortunately the manor is empty tonight and you find yourself at its gates when the game begins.

Everything is point-and-click, from movement to selecting from a (rather small) choice of commands ("turn", "pull") which affect different objects. The puzzles – it's a very puzzle orientated game – mainly involve finding an object which lets you enter new areas of the map and then on to other objects. You can work out many of the puzzles from the many books, scattered around the place, which give you some handy hints.

Sonically and graphically, the game is pretty cool. The sound is excellent (this seems to be one area where the Falcon

programmers are excelling themselves) with high-quality samples adding a lot of atmosphere to the game. Blood curdling screams crack the night, clocks strike, doors creak open, and so on.

The different locations are depicted by touched-up photographs, whilst many of the objects look professionally hand-drawn. There is limited animation in the game – for example, if you open a drawer it opens on the screen – but not much in the way of adversaries. The Manor is supposed to be deserted, after all.

Unfortunately any one location only has the one picture, you can't turn around and look from a different view. This can make things a little confusing since you're never quite sure if the view you have is looking forward or backwards to where you came from. Combined with the hellishly slow movement (you have to watch a single pixel wander around a small map) this can make the game a little frustrating.

Boring

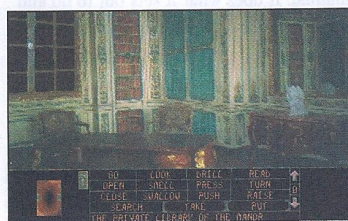
In fact, and I'm not going to beat around the bush on this one, the whole game is frustrating and boring. There's not much to do other than wander about finding objects and seeing if they let you into other previously closed off areas. There's just no scope for interaction with the game using the few commands available. In that sense the game is somewhat less absorbing than the text and graphics adventures from companies like Level 9 back in the mid-eighties.

This is a great shame, because there's obviously been a lot of work put into this game – especially in the graphics and sound department – and this shouldn't go unrewarded. I did think about suggesting that this would be the perfect game for younger children – and in many ways it would. Unfortunately this brought up another big problem.

As I've said, the game was produced by French programmers and you can choose whether to show the text in the game in French, German or English. I don't read German but the English translation is *terrible*. The English is worse than Inspector Clouseau's and, as such, I can't put this game forward as one for the kids.

Here's an example: "I wrote this book in November 1912. In order to explain my point of view about this manor. Because people say critics on it and on the Kruwehl Family."

If Sheer Agony was more of a role-playing game, with some on-screen adversaries, more interaction and much better English then it could be a good 'un. As it stands – and I don't like writing this – it's a crock that you should avoid like the plague.



...at last, the mystery behind the manor begins to unfold.

SHEER AGONY			
GO	LOOK	DRILL	
OPEN	SMELL	PRESS	
CLOSE	SWALLOW	PUSH	
SEARCH	TAKE	PUT	

Publisher: Logitron
 UK Distribution: 16/32 Systems
 Contacts: 01634 710788
 Price: TBA

Requirements: Falcon030, 4 Mb RAM, colour display
 Pros: Good graphics • good sound
 Cons: Awful gameplay • bad English

SCORE: 3

Monster MIDI

Danny Macaleer experiments with his STs...

Arpeggiator

Modular devices are nothing new; neither is using the MIDI ports to network STs and Falcons together. Combining the two to form a Modular MIDI sequencer, however, is perhaps not the first thing you'd think of when writing music on the ST, but it can be very inspirational.

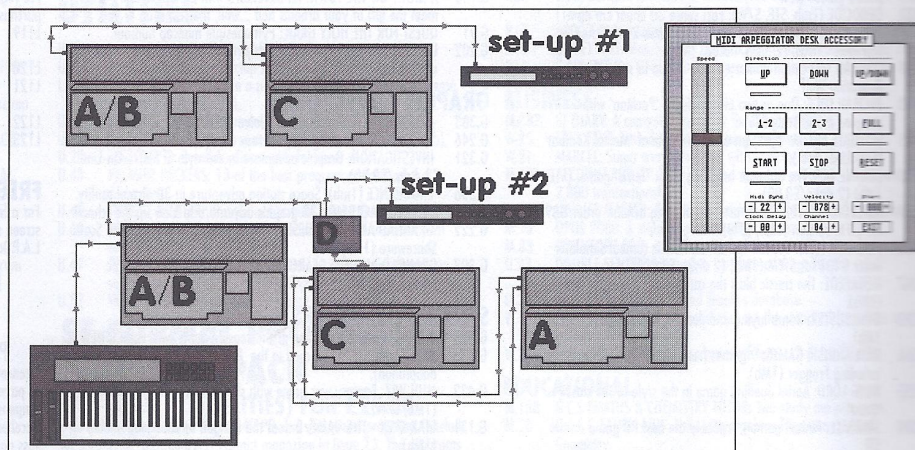
When building your own "sequencer", a few things are essential. Obviously, you'll need a few spare STs, the requisite mile and a half of MIDI cable, and some software for generating sequences. A lot of good programs can actually be sourced from the public domain. How the STs are linked is up to you, but here are some suggestions.

The easiest and most obvious modular sequencer consists of two computers (setup 1). Here, the first ST generates either an arpeggiated figure or an algorithmically composed piece (depending on the program used), and the second (the sequencer) records it. Any sequencing program, Cubase, Logic, or Breakthru, will do to record with. MIDI Arpeggiator can be set to synchronise with the MIDI clock from the sequencer, although some better rhythmical ideas can be created when the two machines aren't in sync at all. This is especially so when the part is quantised afterwards. Of course, various other edits can be performed on the part once it has been recorded, too.

Lego blocks

This setup is mind-numbingly simplistic, though, and it contains about as much potential for creativity as a single Lego brick. A few more bricks are needed to interact with the starting block, and thus build more intricate sequences. Hybrid sequences can then be formed, comprising both the original part, and the new part (setup 2). As well as another Atari, you will also need an additional MIDI interface with at least one input and one output (Steinberg's MIDI-3, SMP24, or E-Magic's Unitor are fine examples).

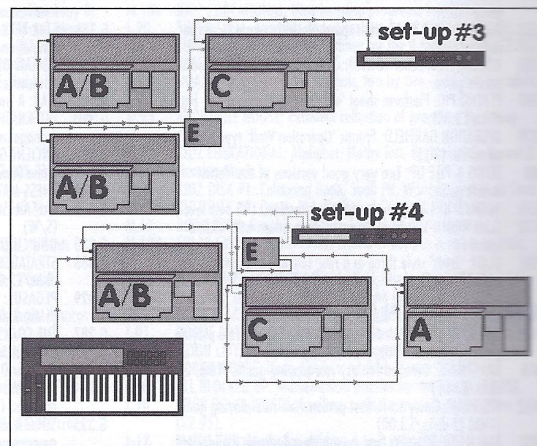
In this setup, Arpeggiator or AMI generates a starting sequence. This is sent to the recording sequencer via the extra input, and then sent out to the modulating Arpeggiator. This modulated sequence is



then sent back to the recording sequencer via the other MIDI in. The result, when AMI is used, is a repetitive riff created by the arpeggiator, covered by scattered, but perfectly harmonised, notes. Using the Arpeggiator as the source for the sequence, the result is slightly different, but no less interesting.

With a bit of experimentation, the speed at which the first Arpeggiator runs could be set to approximately half, or double the speed of the other. Or, one can be set to play the scale upwards, while the other plays downwards. These settings create paradoxically chaotic, yet structurally based sequences, ideal for the starting point of any song.

Without an extra MIDI interface, it is still possible to recreate setup 2; instead of the extra input, you use a MIDI merge (a small box that squashes the two MIDI data streams together), as in setup 4. There are all sorts of fantastic, but perfectly plausible systems when a merge box is included. For example, it then becomes possible to record two Arpeggiators in series as opposed to parallel (setup 3). Obviously, this is similar to using two Arpeggiators in setup 2, but the outcome is vastly different. As neither Arpeggiator is dependent on the other for input, two heterogenous scales or keys, can be used; although what you end up with may not be altogether pleasing to the ear. Complimenting scales can be used for a much more palatable result; and again, the tempos, and directions can be set differently on each computer.



Key

- A - Arpeggiator accessory (Floppyshop MID25)
- B - AMI or Randplay, music generator (Goodmans GD1394)
- C - Sequencer (Cubase, Logic, or Breakthru)
- D - MIDI interface with at least one MIDI in, and one out
- E - MIDI merge (2 in, 1 out) (Arrows denote MIDI data flow)

As with all things modular, it needn't stop at three computers; the only problem you may encounter (apart from convincing people to lend you their STs) is clogging up the MIDI ports with data. You may also like to try other programs, or use a sequence of your own as the starting point. Be warned though, complex systems are liable to crash as often as a Labrador at the steering wheel of an XR3i, but this is part of its charm. Whatever the outcome, constructing a modular MIDI sequencer is both absorbing and fun.

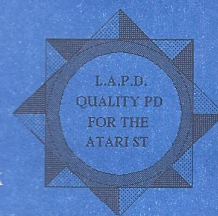
LAPD

Same day service, quality virus-free disks

Please add 50p P&P on orders under £5.00 Overseas customers (outside Europe) please add 50p per disk

ALL DISKS BELOW ARE ONLY £1.50 UNLESS OTHERWISE STATED

PD disks £1.50 each
Budget range PD Disks
only £1.00



GAMES

ARCADE

- G.449 MICHIGAN MIKE & THE LOST CITY OF ZOROG: Super new platformer in the rain forest "NEW"
- G.458 H.E.R.O.: Human Extraction & Rescue Operation: One time commercial platform game "NEW"
- G.450 THE ORIGINAL: Colourful Boulderdash type diamond mining puzzle game "NEW"
- G.433 GENOCIDE (1Mb, STE, S/W): Fast space 3D shoot'em up
- G.417 STAR VOYAGE: Intergalactic action - requires 2 joysticks (Ex Star Trek - TNG). (2 disks/£3.00, 1Mb)
- G.413 COMBAT: Fast action military shoot 'em up in style of Operation Wolf
- G.410 PACMAN ON E: One or two player classic 'PacMan' with sampled music (1Mb, STE)
- G.405 ULTIMATE ARENA: Beat 'em up in the style of 'Mortal Kombat' (STE, 1Mb, S/W)
- G.403 SQUARE OFF: The ultimate tumbling block 'Tetris' game. (STE, 1Mb) (2 disks/£3.00)
- G.398 ASTEROIDIA (STE): Classic asteroid blasting action - order G399 for STFM version (1Mb, S/W)
- G.400 FRANTICK (STE): Superb fast action kinetic combat simulator - order G401 for STFM (1Mb) (2 disks/£3.00)
- G.247 MEGAPEDE: The classic blast the caterpillar 'Centipede' game (1Mb)
- G.395 DYNABUSTER: Bomb laying and dodging arcade game (STE, 1Mb)
- G.366 DAVE MUNSIE GAMES: 9 games from the master programmer, including Frogger (1Mb)
- G.355 WING LORD: Aerial duelling game in the style of the classic 'Joust'
- G.380 STARBALL: Pinball game - arguably the best PD game on the ST
- G.381 MAX: Help Max find his girlfriend. A 'cute' arcade platform game (1Mb)
- G.333 SUPER PSYCHO KART: High speed platform game to rescue piglets (1Mb)
- G.286 ROCKFALL - SPECIAL EDITION: Tunnelling/diamond collecting puzzle game
- G.281 PSYCHO PIG: Platform shoot 'em up with Rambo-esque pig. (2 disks/£3.00)
- G.279 OPERATION GARFIELD: Frantic 'Operation Wolf' type shoot 'em up action. (STE)
- G.80 TETRIS & PILE UP: Two very good versions of the 'Tetris' arcade game.
- G.171 PACMAN II: 1 megabyte version of Pacman, 100 new levels!
- G.110 LLAMATRON: 100 levels of fast arcade action with wicked sound FX.
- G.201 BLAT!: 'Tetris' style three in a row, falling blocks with many added features.

FANTASY/ROLE-PLAY

- G.425 ANORAKS OF DOOM: First person view fantasy role-playing game (2 disks/£3.00)
- G.416 DANGIMERE: Detailed fantasy role-playing game. (1Mb, 2 disks/£3.00)
- G.412 NISHIRAN: Classy sci-fi, first-person view role-playing game. (1Mb) (2 disks/£3.00)
- G.431 REALMS OF REALITY: First-person view dungeon exploration and monster-bash.
- G.351 TOWERS: First-person view role-playing fantasy adventure game "NOW COMPLETE" (1Mb) (2 disks/£3.00)
- G.452 LAP OF THE GODS: Complex German language fantasy role play game (1Mb, mono, 2 disks/£3.00)
- G.308 WALLS OF ILLUSION: The ultimate 'Dungeonmaster' clone with English instructions (1Mb)
- G.426 WYRD WAYS: Magical combat in a maze of sliding walls (1Mb, S/W)
- G.5 MORIA: A complex fantasy D&D based role-play game. (1Mb)
- G.370 MINDMELT: Fantasy adventure with an overhead view.
- G.288 DARKLYTE: 'Space Crusade' type droids wargame.
- G.262 ALIENS: Space Marines v Aliens strategy combat game.
- G.115 MYSTIC WELL: Complete 'Dungeonmaster' style adventure game.

PUZZLES

- G.436 SHRINKING WALL SOLITAIRE (1Mb): Challenging and addictive 'Match it' type game "NEW"
- G.443 WORD QUEST: Construct and play word squares. Over 50 puzzles on disk "NEW"
- G.446 THE FRENCH COLLECTION: Three puzzle games; MANCIOLA, QUINZAIN & MOLECULE.
- G.404 MEMORY RECALL: Challenging memory test with digi pics & sound. (1Mb)
- G.387 SPACESWEEPER: A challenging 'Minesweeper' game in three dimensions!
- G.311 JIGSAW: A computerised jigsaw puzzle (1Mb)
- G.269 QUIZMASTER: Multi-choice answer general knowledge quiz (STE)

TEXT ADVENTURES

- G167 SUSAN: A raunchy adventure for adults.
- G.411 ROBOT REVOLT: A sci-fi text adventure.
- G.184 HEATHER'S EASTER EGG HUNT: Adventure for 7 to 12 year olds.
- G.394 THE SECRET PARK: A text adventure with graphics for children.
- G.225 CALYNYORN: D&D type fantasy adventure set on a far earth-like planet.
- G.140 A NIGHT ON THE TOWN: An adventure with the opportunity to meet the girl of your dreams and ...well, the rest is up to you.
- G.91 QUEST FOR THE HOLY GRAIL: Pythonesque madcap humour.
- G.202 UNKUNLIAN UNDERWORLD: Highly rated large scale text fantasy adventure.

GRAPHIC ADVENTURES

- G.383 MOBSTERS' CITY: Track down twelve gangsters.
- G.246 HYSULA: 3D virtual reality fantasy adventure
- G.321 INVESTIGATION: Graphic adventure in the style of Sierra On-Line. (2 disks/£3.00)
- G.356 ENDURANCE (1Mb): Space station adventure in 3D virtual reality.
- G.200 ANARCHY ACADEMY: 3D graphic adventure to blow up the school!
- G.222 GRANDAD AND THE QUEST...: 3D graphics adventure by Ian Scott. Shareware (1Mb)
- G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES: Graphic adventure (1Mb, 2 disks/£3.00)

STRATEGY & OTHERS

- G.437 BINGO! (1Mb): Simulation of the seaside game with voice. "NEW"
- G.438 RACE (1Mb): Try to succeed in the 'Ratrace' of life (Board game adaptation)
- G.432 MIDI-WIZ: Fantasy war game with similarities to 'Civilisation'. (1Mb, S/W)
- G.131 STAR TREK - THE GAME: Defeat the Klingon threat to the galaxy (1Mb)
- G.427 AIR TRAFFIC CONTROLLER: Control comings and goings at a busy international airport.
- G.386 STAR TREK - KLINGON WARS: A Starship Enterprise battle simulation (1Mb)
- G.431 REALMS OF REALITY: 'Dungeonmaster' type exploration and adventure. (1Mb)
- G.421 WAR: A wargame construction kit. (1Mb)
- G.390 INTERNATIONAL MANAGER: European Nations/World Cup management game.
- G.391 ANCIENT GAME OF GO: Two computer versions of the Oriental game (Gnugo, Arigo).
- G.344 CHESS-MATE: A chess/draughts game analysis tool.
- G.332 CAESAR: Strategy game set around the Mediterranean in 200BC (S/W)
- G.330 GNU CHESS: French chess playing program for all levels.
- G.388 STRATAGEM: Two player strategy world war game. (2 disks/£3.00)
- G.329 PEGASUS: Space strategy game. Seek out and colonise planets. (1Mb, 2 disks/£3.00)
- G.287 THE COARSE ANGLER: Angling simulation game (1Mb)
- G.237 CHAOS: Madcap game of battling wizards by Martin Brownlow (1Mb or 0.5Mb)
- G.324 IMPERIAL CONQUEST: Complex ancient Mediterranean game of conquest (S/W)
- G.325 SOCCER MANAGEMENT: A complex simulation of soccer management (S/W)
- G.217 THE MAZE: 3D adventure game loosely based on 'The Crystal Maze'
- G.173 PENGUINS: Move your penguins around the screen 'Lemming' fashion.
- G.10 VEGAS: Roulette, poker, blackjack and slots... without the Nevada sand!

BUDGIE UK

- BU.119 FOOTBALL TACTICIAN 1: The original £19.95 Premier League version of the soccer management game!
- BU.111 INTERNATIONAL CRICKET II: Animated 3D game (1Mb)
- BU.50 SPACE INVADERS: Classic arcade action by Robert Leong.
- BU.90 MATCH IT: Possibly the most addictive game ever devised.
- BU.89 HORSE RACING SIM: Quality sim from the sale ring to the track.
- BU.30 QUEST FOR GALAXIA: The "Galaxians" return to your ST.BU.70
- PACMAN SE: The definitive version by Robert Leong.
- BU.71 DARK WARS: Role-playing adventure with a 3D view.

ST FORMAT TOP 10 GAMES - ONLY £12.00

A special bargain bundle of the top 10 PD and shareware games as selected by ST Format magazine in issue 75. They are 4-7-11, Caloritis, Drachen, Grandad and the Quest for the Holy Vest, Grandad and the Search for the Sandwiches, Llamatron, Ozono, Starball, Stella, Super Breakout and Towers.

DAVE MUNSIE GAMES

Munsie Games, some of the most playable and fun-filled games on the Atari, can now be registered via L.A.P.D.! Send us the code number from your game and we'll send you the pass-code giving access to extra lives, extra levels, etc. Cost is just £6.00 per title. Games that can be registered so far are Asteroidia, Frantic and Square Off. All registrations receive a FREE copy of Dave's SEAWOLF game! Pre-registered complete versions of these incredible games may also be purchased as follows:

- L119 ASTEROIDIA: The classic game 'Asteroids' with 3D rendered asteroids. (STE, £7.00)
- L120 ASTEROIDIA: The STFM version of the above. (STFM, £7.00)
- L121 FRANTICK: Fast action kinetic combat simulator Frantick. (STE, £7.50)
- L122 FRANTICK: The STFM version of the above. (STFM, £7.50)
- L123 SQUARE OFF: Falling block puzzle game in the style of the classic 'Tetris'. (£7.50)

FREE MUNSIE DISK'O'ZINE

For a free copy of Dave Munsie's magazine disk with information and screen shots about his games just send a blank disk and an s.s.a.e. to the L.A.P.D. at the address above.

L.A.P.D. LICENCEWARE GAMES

Possibly the best licenceware range on the ST.

Licenceware means that for every copy you buy the author receives a royalty payment from L.A.P.D. This ensures that the authors receive suitable recompense for their hard work thus encouraging them to produce even more excellent programs for the Atari range of computers. It saves you all the fuss and hassle of shareware payments. Licenceware programs are complete and ready to run, there are no hidden fees!

STRATEGY GAMES

- L136 TRADER (£3.00): Sea trading game set in 14th century northern Europe "NEW"
- L135 ANNEX (£4.95): 3D role play inspired by 'Dungeonmaster' and 'Doom' "NEW"
- L128 BLUDGEON V2 (1Mb, £3.00): Computer moderated fantasy combat system for one or more players. Includes two free adventure scenarios.
- L129 BLUDGEON ADVENTURES #1 (£3.00): Six additional solo adventures for the above BLUDGEON game.
- L124 THE SANDS OF MARS (£3.00): Govern a Martian mining colony.
- L132 SEA WAR (1Mb, £2.50): Hi-tech version of 'Battleships'. Design and fight your own fleet.
- L105 CONQUEST 2 (1Mb, £3.00): Rule over a medieval kingdom's economy and armies.
- L104 WAR OVER THE REICH (1Mb, £3.00): Plan and execute a campaign of WWII raids against twelve German cities.
- L98 WORLD AT WAR (1Mb, £3.00): A game of economic and military strategy on a grand scale for one to seven players.
- L22 GRAND PRIX MANAGER (£2.50): Simulation game of running a Formula One Grand Prix team.
- L79 DARKLYTE II (1Mb, £3.00): A sci-fi space/strategy game in which you must destroy the Darklyte forces. Reminiscent of the 'Space Crusade' game.
- L118 THEY SOLD SEVERAL (£3.00): by Ben Weston. The five games on one disk: THE UNMANNIFERENT 15, a simple wild west shoot 'em up game. CLAN, a Hamurabi ruling type game. QUEST KNIGHT, A fantasy game. LOGICPROBLEMS, five challenging electronic puzzles. LOGIC PROBLEMS II, more of the same.
- L42 OUTWORLD (£2.50): An arcade/strategy game in which you take control of a space colony.
- L53 HOT DOG (£2.50): A game of greyhound racing for one to nine players.
- L59 ARTHUR OF THE BRITONS (1Mb, £3.00): A strategy game with arcade sequences.
- L60 CONQUEST (1Mb, £3.00): A 'God' game in which your task is simply to survive for one year.

ARCADE GAMES

- L130 DESERT HAWK (1Mb, £3.00): Control a Black Hawk helicopter through different missions.
- L93 PROJECT PURIFY (£3.00): Attempt to clear twenty sectors of space debris 'Asteroids' style.
- L87 STORM 94 (1Mb, STE, £3.00): Arcade action clearing aliens from a stricken space-freighter.
- L91 STORM 94 (1Mb, STFM, £3.00): As L87 above but for the STFM.
- L86 FLUFFIES (1Mb, £3.00): A platform game across many levels as you guide a blue fluffy creature in an attempt to rescue his girl friend.
- L80 MUNCHKIN (£2.50): The perpetually popular Pacman pastime!
- L116 STREETS (£3.00): Drive your motorcar around the streets collecting diamonds and blasting.
- L117 FISH TANK (£3.00): A game for younger players who must find food for their fish without getting eaten.
- L70 CHRONIC INVADERS (£2.50): The 'Space Invaders' return in this

P.O.BOX No.2 Heanor Derbyshire DE75 7YP Tel or Fax: 01773 761944/605010 (orders only)
e-mail: clive@lapd.demon.co.uk or leigh@lapd2.demon.co.uk

24 hour despatch on all orders - No waiting around for disks to arrive

reworking of the all time classic computer game.

- L.61 3D ASTEROIDS (1Mb, £2.50): Based on the classic 'Asteroids' game - but in 3D!

ADVENTURE & ROLE-PLAYING GAMES

- L.131 WANDERING SCIENCE (£2.50): Solve the puzzles on an alien vessel. A graphic adventure.
L.125 PATHS OF GLORY (£3.00): A sword and sorcery role-playing game.
L.115 DEMON II (1Mb, £3.00): A fantasy adventure game with an over head view and detailed point and click interface.
L.114 TIME MACHINE (£3.00): A classy text based adventure with over 100 locations and over 40 graphic screens.
L.112 CRAGHAVEN (£2.50): High adventure in a fantasy land.
L.97 STONE COLD SOBER (£4.00): A traditional adventure game but with a point and click interface.
L.69 BIO-HAZARD (1Mb, £3.00): A first person perspective game to clear a space freighter of alien creatures.
L.21 DEAD OR ALIVE (£3.00): A large, complex and humorous textadventure game.
L.31 THE CURSE OF AZRIEL (2 disks, £4.00): A graphic fantasy role-playing/trading game.
L.41 MURDER ON THE ORION EXPRESS (£3.00): A murder mystery game with an almost infinite variety of solutions.
L.50 DEMON (£3.00): Trapped in a stone cell, your first task is to escape before the resident demon gets back. 3D view.

PUZZLES

- L.133 LAZER (£2.50): Use mirrors to direct a lazer around mazes. *NEW*
L.110 QUICK FLIP (£3.00): A mind-bending tile flipping game.
L.106 CRAZY LETTERS (1Mb, £3.00): A word search game to find a seven letter word hidden behind a grid of squares.
L.102 DCS COMPILATION #4 (£3.00): On this disk are: BRAIN DAMAGE, test your brain to the limit. SHAPES, make shapes from 16 different pieces. LINK, form a chain across the screen. QUIZICAL, multi-choice question and answer game.
L.101 DCS COMPILATION #3 (£3.00): On this disk are: OUTRAGEOUS FORTUNE, a collection of logic and maths challenges. MATCH MAKER 2, match symbols on hidden cards. FRAME OF MIND, a gambling game. CRYPTOGRAM, based loosely on the TV program 'Countdown'.
L.100 DCS COMPILATION #2 (£3.00): On this disk are: QUEST FOR KNOWLEDGE (1Mb), seek out 12 hidden icons from mazes. REBOUND, a bat and ball game. GALACTIC FRUITBOWL, a combination of the fruit machine and the trivia quiz. GREY MATTER, a word game.
L.99 DCS COMPILATION #1 (£3.00): On this disk are: ACECHASE, a gambling program. THE WIZ, a fun program comprised of ten tests. MINDLOCK, a quiz program. MATCH MAKER, match up hidden symbols.
L.96 TILES IN SPACE (£3.00): A computer version of the sliding tile puzzle game.
L.94 GRID MANIA (£3.00): A word search game for 1 or 2 players.
L.92 BAMBOOZLE (£3.00): A puzzle game where you must turn all the symbols on a 25 square grid to higher scoring ones.
L.85 ZUFFERS (£3.00): A puzzle game where you must rescue microscopic creatures.
L.84 WORD WIZARD (£3.00): A one or two player word guessing game with different levels of difficulty.
L.83 ZIGGY (£3.00): A puzzle game of turning globes.
L.75 FREAKED OUT (£3.00): A joystick controlled puzzle game.
L.74 NICE BYTES MEGA PACK #1 (£3.00): On this disk: ATOMOMIX, place atoms of varying energies onto a grid. PURE LOGIC, a game based on Boolean logic. REGA, a tile flipping game on a 5 x 5 grid. LOGICA, a three phase logic/puzzle game.
L.66 HEARTBREAK (£3.00): An infuriating and highly addictive puzzle game played on a 7 x 7 grid.
L.11 PI SQUARED (£2.50): A puzzle game. Convert all the symbols to Pi.
L.14 DICEY (£2.50): A challenging dice game in the style of the classic 'Yahtzee'.
L.40 GRIDWORD (£2.50): A word game in which you attempt to make the longest word possible.
L.52 ENERGETIX (£3.00): A puzzle game that challenges you to find those exact procedures to start a nuclear reactor.
L.58 NICE BYTES #1 (£2.50): On this disk: GRIDWORD: A word game for up to 4. REGA: A tile-flipping strategy game.

ART & GRAPHICS

- A.99 MINIPICS II: All resolution picture converter and catalogue (1Mb).
L.77 AUTO-STEREOGRAM: Create your own 3D 'Magic Eye' pictures. (1Mb) (£3.00).
A.107 ASCII ART: Hundreds of images rendered in ascii characters.
A.95 VISUAL ILLUSIONS: A collection of 24 'Magic Eye' 3D pictures.
A.98 STEREOGRAM ANIMATIONS: Now see 'Magic Eye' pictures move!
A.36 KOZMIC 4: Complete version of the stunning psychedelic pattern creator.
A.1 ANI ST: Commercial quality animation program (once cost £60.00 to buy!).
A.84 GEMVIEW: Load, view, convert just about any picture format (1Mb).
A.45 CRACK ART: Demo version of the excellent German art program.
A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects.
A.44 FANTASY SLIDESHOW: Spectrum 512 pictures on fantasy theme

CLIP ART

(Where PCX and IMG formats are offered you must state which you require.)

- A.103 OFFICE CLIP ART: 33 IMG or PCX images of office related items.
A.107 HANDS CLIP ART: Over 70 IMG images of hands; pointing, waving, writing, etc.
A.100 ANIMALS CLIP ART (5 disks/£7.50): Over 170 IMG or PCX images of animals.

- A.101 ASTROLOGY CLIP ART (3 disks/£4.50): 36 IMG or PCX images of zodiac signs.
A.102 SPACE CLIP ART: 38 images of the final frontier in PCX or IMG format.
A.106 CHRISTMAS CLIP ART (3 disks/£4.50): Over 150 images in PCX or IMG.
L.26, L.27, L.28 TYPE WRITE CLIP ART: 4 disk sets of quality clip art in IMG format. (£10.00 per set).

MUSIC

- S.160 GUITAR REFERENCE: Useful program for anyone learning or playing.
S.4 YAMAHA PSS: Patch editor and facility to print tablature music.
S.144 EKSEQ 1: A 100 track, 240ppan sequencer with many features.
S.145 OPTRONIX MUZAK: Rip and play music from other programs.
S.8 NOSETRACKER: Soundtracker .MOD player with eight starter tunes.
S.7 ACCOMPANIST: 16 Voice Henry Cosh sequencer (full instructions on disk).
S.19 ALCHIMIE JR: Impressive Swiss multi-window, multi-task sequencer (1Mb).
S.158 SWEET 16 LITE: An easy way into MIDI sequencing

UTILITIES

- U.80 ZORG: A 'Disk Doctor' type organiser.
U.77 THING: Alternative desktop (1Mb).
L.111 SUPER HACKER: Replace a picture in almost any game or demo with your own! (£3.00).
U.67 ST TOOLS: An exhaustive collection of Atari ST utilities.
U.53 TERADESK V1.36: Replacement desktop for the ST/STE (1Mb).
U.20 FASTCOPY 3: Excellent disk copier for cover disks.
U.48 PREMIER PACKERS: 13 of the best program packers, plus a de-packer.
U.42 PICTURE HUNTER: Rips picture screens from other programs.
U.66 BEFORE DAWN: Animated screen saver that will use your own animations.
U.47 PROBE ST: Handy utility. Grabs music/graphics, disk/memory editor, etc.
U.52 VAULT & TURTLE: Fast hard disk back-up utilities.

ST FORMAT PRODUCTIVITY PACK

(TOP 40 UTILITIES) FOR £25.00

A special bargain pack of the top 40 PD and shareware programs (excluding games) as selected by ST Format magazine in issue 75. The programs are: Atomik 3.6, Autosart, Cardfile, Chameleon, Compact Office Manager, Crack Art, DB Backup, Easy Text, Elf Backuper, ESS Code, Everest, Fast Copy 3, GEM Spool, GEM View, Hypergem, Idealist, Kivi Quik, LHArc, Marvel, Magic Story Book, Mouse-a-Mania, Movie Master, Octalysar, Opus, POV Ray Trace, ProCalc, Revenge Document Displayer, Sagraton, Second ST Manual, Selectric, Soundlab, SpiritEd, ST Diary, Superboot, Sweet 16, Teddy Term, Teradesk, Tom Shell, Turbo 407 and X Control.

MISCELLANEOUS

- M.189 NATIONAL LOTTERY SIMULATOR: (1Mb, 2 disks/£3.00). The fun way to pick your numbers.
M.177 LOTTERY COMPANION: Valued statistical assistance with your lottery entries.
M.195 ELEMENTS PLUS: Information/help disk for chemistry students *NEW*
L.134 FILM DIRECTOR ELITE: Multi-media language system - from slideshows to packages (2 disks/£4.95) *NEW*
M.194 ROLL IT: Selects lottery numbers randomly and calculates chances of winning a prize *NEW*
M.193 OUT OF THIS WORD: A fun typing tutor - type the tumbling letters before they crash.
M.183 HOUSE EXPENSE MANAGER: Daily household expense management program.
L.103 LEXICON: The ideal program for word game fanatics. Solve cross words, anagrams etc (£3.00).
L.111 SUPER-HACKER: Put your own picture into demos, games etc. (£3.00)
M.146 AWARD MAKER: Design and print awards certificates.
M.155 ROUTE FINDER: Route finding program for England, Wales and Scotland.
M.161 THE GARDENER: A special database for gardening enthusiasts.
M.175 FISHERMAN'S DATABASE: The ultimate record program for the keen angler.
M.19 AIR WARRIOR: Flight sim with World War II aircraft.
L.17 ADDRESS BOOK: Neat and easy to use database for names and addresses (£2.50).
L.18 IRCUT: Easy to use electrical circuit diagram producing program (£2.50).
M.93 STITCH MATRIX: Pattern making program for knitting machines.
M.77 THE BIBLE: King James authorised version (3 disks/£4.50).
M.76 FORM-FINDER: Proven horse race analysis and prediction program.
M.81 NEWSDISK: Construct your own newsletters and magazine disks.
M.100 GERMAN TRANSLATORS: Three programs to translate German text to English.
M.26 GENEALOGY: Two programs for the family historians to trace their forebears.
M.5 YOUR SECOND ATARI ST MANUAL: Text files to supplement the official manual.
M.17 WORD PUZZLE: Stuck with word games? Then this disk may help.
M.30 EXTRA WORD LIST: 70,000 extra words to use with disk M17.
M.190 YALESTAR CATALOGUE & STARCHART: Programs for the serious astronomer.
M.111 NORTHERN & EQUATORIAL STAR ATLAS: Superb serious astronomy program S/W.

- M.1 PLANETARIUM: Excellent, easy to use, astronomy program.
M.8 ASTRONOMY & SKYWATCH: Programs for the technically minded sky watcher.
M.173 THEBIBLE: (3 disks/£4.50) Complete King James, old and new testaments.
M.176 FUSCHIAS DATABASE for the keen specialist gardener (or breeder of anything).
L.89 GOLF (£3.00) A database for the golfing sportsperson.

PROGRAMMING

- F.53 STOSTESTERONE: A magazine disk devoted to programming STOS on the STE (issues 1 to 3 available).
P.53 IMAGINARY WORLD: Easy to use language to write your own role-play adventures.
P.55 STOS CYBER EXTENSION: An extension to the STOS programming language.
P.44 GFA V2: Full version of language with tutorial & compiler! (N.B this disk is not PD - L.A.P.D. have permission to distribute it.)
L.68 SPRITE WORKS: (2 disks/£7.00) New commands for games writers using GFA V3+
DSP.1 SOZOBON C: A complete C compiler with documentation.
P.24 MENU-MAKER: Make your own menus with music, sprite and scrolling message.
P.33 ZX SPECTRUM EMULATOR: Emulate the old Speccy on your ST/STE (1Mb).
P.17 68000 PROGRAMMING COURSE: 10 'How to do it' document files.
P.19 GFA EXPERT: Massive text file and help routines for GFA-Basic 3.0.
P.16 C ADVENTURE TOOL KIT: Write professional quality adventures in C.

BUSINESS

- M.182 ST DIARY: A computer diary for the busy executive.
W.25 EASY TEXT: Easy desktop publishing program.
W.21 MARCEL: Super word processor with built in spell checker.
M.106 ACCOUNT-ABILITY: Fully featured accounts program. 10 accounts, 2,000 transactions!
M.148 INVOICE MASTER: Excellent invoicing system for small businesses.
M.13 OPUS 2000: A superb spreadsheet program (1Mb).
M.83 INVENTORY PRO: A stock control system.
U.23 DOUBLE SENTRY: Impressive accounts package for the small company.
U.33 FAST BASE: A powerful and flexible database.
W.3 FIRST WORD: Word processor that set the standard for others to follow.
W.24 GDOS FONTS: A large assortment of fonts. (2 disks/£3.00)

EDUCATIONAL

- M.188 G.C.S.E.MATHS & CHEMISTRY TUTOR: Two study aid programs.
M.20 G.C.S.E. STUDY AIDS: Help with Algebra, Trigonometry and Geometry.
M.187 TYPING TUTOR: Several courses to improve your skills.
M.186 KIDZ EDUCATIONAL: Nine learning programs for youngsters.
L.20 SUPER SPELL: Teaching games for the 4 to 9 year old (£2.50).
L.37 SUPER FILM: More teaching games for the 4 to 9 year old (£2.50).
G.266 WITCHES, MICE & FAIRY TALES: Games for younger users.
G.83 NOAH'S ARK: Collect the animals, two by two - additive for adults too!
M.95 ABOUT THE HOUSE: Excellent collection of programs for young children.
M.28 KIDZ EDUCATIONAL: Alphabet, Maths Test, Numerical-Go-Round & Number Maze.
M.37 KIDZ DISK #1: Colouring Book, Spell Pic, Word Pic and Flash Card.
M.42 KIDZ DISK #2: Dot to Dot, Keyboard Capers & Matching.
M.67 BODY SHOP: Graphic quiz-type human anatomy tutor.
M.104 SOLAR SYSTEM GEOGRAPHY: Effects of the sun & moon on tides, seasons, etc.
M.16 KIDZ COMPILATION: Kid Graph, Grid, Music, Notes, Piano, Publisher, sketch and story... all on one disk!
PRO.27 EARLY LEARNING MATHS 2: by Philip Rankin for 9-12 years.
L.01 ROBOT MATHS: Maths tutor for children aged 6+ (£2.95).
L.02 MOON LETTERS: Spelling game for ages 5+ (£2.95).
L.04 ROBOT WORDS: Hangman in a modern format (£2.95).
L.08 ALL BLOCKED UP: Mathematical puzzles for the young (£2.95).
L.10 DROP DOWN WORDS: Spelling/memory game for youngsters (£2.95).
L.12 MATHS FUN: Maths for children 4 to 7 years (£2.95).
M.153 WORLD WAR II: Home front study pack for Sec. school work (3 disks/£4.50).
M.7 HISTORY FILE: Investigate a historical murder in Scotland (3 disks/£4.50).
M.86 DEATH OF A PRESIDENT: Investigate the Kennedy assassination (3 disks/£4.50).
M.114 FRANGAIS 3 & 4: French language tutor programs.
M.123 C.I.A. WORLD FACTBOOK: Facts and figures on countries (4 disks/£6.00).
W.22 HOMEWORK: A word processor for the younger user.

COMMUNICATIONS

- C.28 INTERNET ACCESS PACK: WWW access for the Atari.
C.25 JUNIOR OFFICE: Fax software for Class 2 modems (best with hard drive).
L.113 BBS DIRECTORY: Money saving directory of UK BBS's (£5.00).
C.22 TEDDYTERM: A superb multi-function communications program.
C.7 VANTERM V4: Excellent multi-function communications program.
M.138 MORSE CODE TUTOR: Practice and perfect your skills.
C.24 OFF-LINE READERS: Four off-line reader programs.

BUDGET PRICE DISKS - ONLY £1.00 EACH!

- B.45 FIGHTING SAIL: Naval battles B.51 COLOSSAL CAVE: The original adventure B.39 ASTEROIDS: A loving restoration B.15 ROLL 'N' NUDGE: Fruit machine B.20 HACMAN: Pacman action B.36 8 BALL POOL: Bar game simulation B.27 FROGGY: The arcade classic B.50 STAR TREK: Save the Federation B.58 GALAXIANS: Diving Invaders B.44 FLY ROBIN: Cute children's game

Free Catalogue

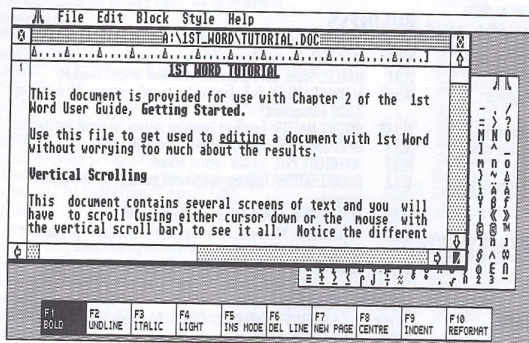
If you are either a new customer to L.A.P.D. simply write to the address above with a S.A.S.E. and we will send you a free copy of either our disk based catalogue or our printed catalogue (state which you prefer). Please state if you have a Falcon. If you are an existing customer, simply return your catalogue disk and we will update it for you.



http://exxos.www.idnet.com/IMPULSE/atari/last/

Compo classic

Just bought an ST, don't know what to do with it? Well, Compo has the answer in the shape of some classic Atari stock bought at bargain prices. Kevin Beardsworth looks at what's on offer...

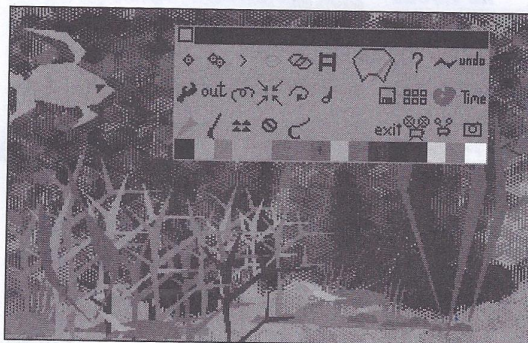


A classic word processor. Sadly lacking in the spell check department.

Discovery Xtra

The Discovery Xtra pack is just what the package title implies. It will help novice ST owners into discovering new ways of using their computers. It contains nine pieces of software on six disks with two manuals. There is something in here for all tastes, from the artist to the avid games player.

Clearly aimed at beginners, it contains such classics as 1st Word, a basic word processing program, though one sadly lacking a spell checker. If you want to learn programming then try First Basic or if you have more artistic leanings Neochrome and Ani ST should keep you busy for hours. Create your masterpiece in Neochrome and then transfer it to Ani ST for animation or tweening, as it's called in the trade. If GEM and the Atari desktop is alien to you, have a guided excursion with ST Tour.



Ani ST Da dum da dum da da da da!

On the games side you'll find the legendary Sim City. This has to be one of the best and most popular games ever written. Think you can do a better job with money from the council tax? Now's your chance to prove it. Build a great city, but take care to keep the citizens happy or you'll be for it.

Escape From The Planet Of Robot Monsters, pits you against Robotic rogues in a 3D environment whose aim is to make your character's life as difficult and dangerous as possible. Final Fight is a Street Fighter clone - you can choose one of three fighters to do battle on the dirty streets of Metro City. Do you like cats? Nine Lives is a catty platform game. You must guide Bob cat through several dangerous levels in his mission to rescue Claudette, his girlfriend from the clutches of two mad scientists.

At \$14.95 this collection is a steal. Sim City is clearly the star of the pack and it comes highly recommended.

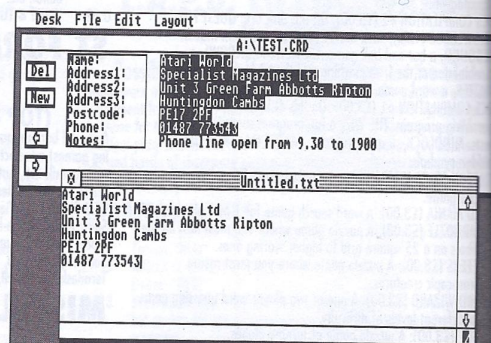
Badlands Pete

No, nothing to do with bogs or marshes - Badlands Pete Coyote is the leanest, meanest, six gun son of a... Well you get the idea. With six guns in hand you must rescue the governor's daughters in this Strip-A-Mation spectacular.

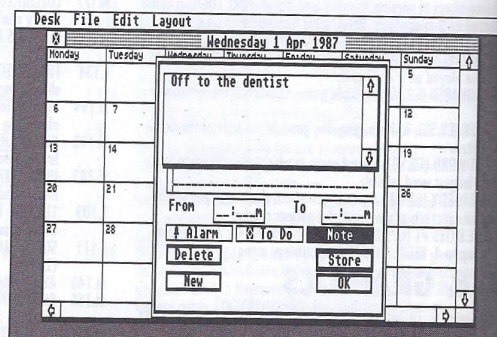
All the game action occurs through a status panel window onto the Western world. Around the window are various items to aid you in your quest. Items can be collected during the game from other characters you meet and places you visit.

The aim of the game is to get as many bounty dollars as possible and get you on the high score table. Everyone from mountain men to undertakers are going to make it their business "to make your money."

The price a mere £4.99 and for that you even get a free poster.



Atari Organiser - cut and paste between mod



Atari Organiser. Never miss the dentists again.

Organiser

The ST Organiser comes on one disk with a 23-page manual. The program has everything needed to manage your personal information in a more time effective, organised manner. It includes a diary, address file, spread sheet and word processor. The manual states that these have advanced features, which indeed they do. But don't expect Atari Works for a price of £4.99.

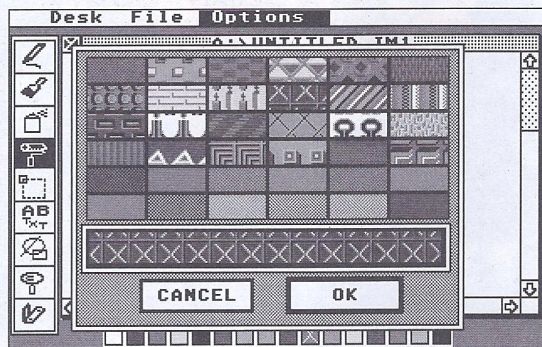
When you select the diary it displays a calendar for the current month. Providing your ST clock is set correctly, of course. By clicking on one of the day cells

you can enter a note, a to do or an alarm. Notes stay fixed to the day they were entered on. To dos, however, move from day to day until they are deleted. If you enter an alarm it will sound on the day you selected.

The word processor has a basic page layout function. It can also underline, bold or italicise your text. A maximum grid size of 26 columns and 30 rows is accessible from the spread sheet which should be ample for keeping personal accounts. Formula-wise you are restricted to the bog-standard minus, plus, multiply and divide.

Addresses are easy to enter via the address manager. One good feature of the data base is its ability to dial telephone numbers if you have a modem.

Data can be copied from one part of Organiser to the other. For instance you could copy an address from the address manager and paste it into your word processor.



HyperPaint 2. A classic paint program.

HyperPaint 2

What can I say about Hyperpaint that hasn't already been said? It is the only art package you'll ever need for your ST. Supplied on one disk with a very good manual, it's a bargain at just £4.99.

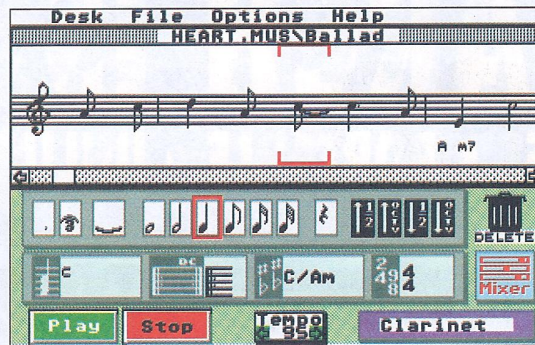
An icon bar contains all the usual tools you'd expected in a good art package. Hyperpaint's block handling is excellent. Once a block is selected you can cut and paste, rescale and stretch, rotate, flip, outline, or save it.

File formats supported include Neochrome, Art Director, Degas and IMG. This program has so many features we'd need to write a full review to do it justice but if you need a paint package, this one's well worth a try.

Atari Music

There couldn't really be an Atari warehouse sale without including some musical applications.

First we have An Introduction to Sound and Music. For £19.99 you get a Sample Master Cartridge and three disks containing Sample Master Plus, Music



Music Maker. Look out Oasis, here I come.

Maker and Music Maker Plus. There are also two slim user guides.

Music Maker and Music Maker Plus are basically the same. The plus version is specially designed to take advantage of the STe's stereo DMA sound. Both programs can play composed music, carry out MIDI recording and playback, edit drum patterns and have MIDI drum control. The Plus version in addition can load samples from the Sample

Maker Cartridge. Sample Master Plus can record sounds into the computer via the sample cartridge. The sound once recorded can be edited in a variety of ways. They can then be

imported into Music Maker Plus for further work. Music Maker is also available separately for £4.99.

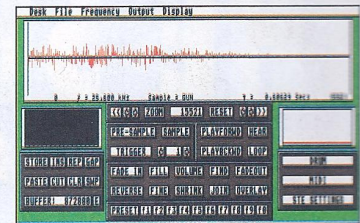
Family Curriculum Pack

For £14.99 you get the full Family Curriculum Pack. This is split into four modules each contained in a separate box. The modules are Family Computing, GCSE Revision, Junior School and Play and Learn.

Family Computing contains Hyperpaint 2, Music Maker, First Basic, First Word, Ani ST and 2 games. These are Nine Lives and Prince. In Prince you have to control an army over several maps and defeat the computer's army. You can join two STs together and do battle with a friend. Two manuals cover program use though I couldn't find a games manual.

Micro Maths, French Mistress and Geography Quiz are contained on one disk in the GCSE Revision module along side a slim manual. Micro Maths claims to take the user from beginner to GCSE standard using 24 programs covering 59 topics. A calculator function is supplied if you really get stuck.

The French Mistress uses the "Kosmos language learning program". It mainly covers vocabulary tuition. According to



Sample Master. Now you can nick all those good guitar riffs.

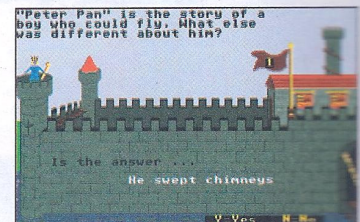


Learn French with the French mistress. Move over Pamela Anderson.

the manual this is the most tedious part of grasping a foreign language.

You'll need to use the Play and Learn module in order to load the Geography quiz. The quiz covers 20 countries and is designed to give a good general insight into physical and economic geography. Play and learn is a complete reading tutor comprising three parts. Prof Plays A New Game, Prof Looks At Words and Prof Makes Sentences. The pack contains a manual, five childrens' reading books and two disks.

The Junior School module contains two disks holding four programs. These are Primary Maths, Answer Back Junior quiz, General Knowledge Quiz and Spelling Quiz. You can pick between multiple-choice, true or false and complete the answer. It's great fun for adults as well as kids.



General knowledge quiz. Get the question right...



... and you're rewarded with a kill - the -dragon - before - it -eats -the -quiz - master game.

Compatibility

All these bargain basement programs are compatible with all ST's apart from Music Maker Plus which is STe only. The games, quizzes, tutor software, Ani ST, Neochrome and Music Maker are ST Low resolution only. Everything else works in ST Medium or ST High. They're available from Compo Software on 01487 773582 - while stocks last!

THE SEARCH IS OVER

FAST • EASY • SAFE • PORTABLE • UNLIMITED STORAGE



Affordable

**IN
STOCK
NOW**

The EZ Drive is the affordable way to free up space on your computer, make fast reliable back-ups and work with large files. Each cartridge holds 135MB yet is small enough to fit in your pocket. Syquest's proven reliability, hard-drive speed, and unlimited storage has made Syquest drives the world's number one selling high performance removable storage device, and your number one choice!

EZ Drive complete with SCSI cable £199 inc VAT
EZ Drive with Toplink £249 (For ST owners without a SCSI Hard Disk)

To order call 0181 345 6000

We have moved Please note our new address

GASTEINER

Address 18-22 Stirling Way, North Circular Rd, Edmonton, N18 2ZY

E&OE

PRICE BLOW-OUT ON TOP QUALITY CD ROM DRIVES



**FROM
£149**
inc

Also works
as a
portable
CD audio
player!

Media Vision
CD ROM drive with
SCSI cable £149

**CD ROM
complete with
Toplink £199**
(for ST owners without
SCSI hard disk)

Affordable

The time was when CD ROM drives were out of reach of the pocket of most ST owners - no more! We have large stocks of high quality Media Vision SCSI CD ROM drives & are able to offer them at just £149 inc VAT,

More than just a CD ROM drive the unit can also be used as a portable CD player - it really is that compact.

To order call 0181 345 6000

We have moved Please note our new address

GASTEINER

Address 18-22 Stirling Way, North Circular Rd, Edmonton, N18 2ZY

E&OE

BASIC

In part four of Ofir Gal's ongoing series, you will learn how to put file management into practice as we move a step closer to a working database application.

Modern database programs normally offer a lot more than we can ever cover in a tutorial, but no matter how complex and powerful the applications are, they all provide the following basic functions:

- * Data entry via a form
- * Data storage
- * Data retrieval

There are two ways of going about form design. The most user friendly way is to use GEM to create non-modal form windows. While this is highly desirable and can be achieved using HiSoft BASIC, it is also quite complex and requires good knowledge of the workings of GEM. The easiest route to take is to build a DOS-like interface by utilising the commands already available in BASIC. You should be familiar with the PRINT and INPUT commands – if not refer back to Atari World issue 8. These will be used to allow entering data into the database as well as displaying existing data.

Data structure

It is best to separate the data entry parts from the rest of the program. This is done by employing SUBS and SHARED variables. If at a later time you wanted to replace the TOS forms with proper GEM ones, you would simply need to replace the relevant SUBS without having to worry about other parts of the program. This programming style should be adhered to as it also makes the task of finding bugs a lot simpler. All programs have bugs, right?

Going for an address book style database, the data entry form should include the following arrays:

```
DEFINT a-z
CONST records=99
DIM first_name$(records), last_name$(records)
DIM address$(records), town$(records), county$(records)
DIM postcode$(records), country$(records), tel1$(records)
DIM tel2$(records), fax$(records)
```

The DEFINT a-z statement on the first line tells BASIC to default to using integers unless otherwise indicated. This saves you having to type % after each variable and constant name. The second line is used to define the value of the CONSTANT *records*. Constants are similar to variables but unlike them, the value of a constant cannot be changed. Each of the arrays contains 100 (from 0 to 99) text elements. Should you need to increase the size of the database, all you need to do is to change the value of the constant *records* and recompile. As it stands, you can store the name, address and telephone numbers of up to 100 people. As you can see from the example, it is possible to define several arrays on the same line, so long as you separate them with a comma.

In practice, it seems wasteful to create so many arrays and this is where the multi-dimensional array comes into

```
DEFINT a-z
CONST records=99, first_name=0, last_name=1
CONST address=2, town=3, county=4, postcode=5
CONST country=6, tel1=7, tel2=8, fax=9
DIM book$(records, fax)
```

play. Instead of using 10 separate arrays we can use just the one as shown the following example:

The array contains 100 records, each is now further divided into 10 fields. If you want to display the postcode of the third person in the database for example, you simply use PRINT book\$(2,postcode).

Data entry

Data entry will be via a series of INPUT statements. Once data entry is complete, the new record should be saved to the database using APPEND mode, as explained in the last issue of Atari World. A most basic version of the data entry routine follows:

```
SUB DataEntry(rec)
SHARED book$()
INPUT "First name";book$(rec,first_name)
INPUT "Last name";book$(rec,last_name)
INPUT "Address";book$(rec,address)
INPUT "Town";book$(rec,town)
INPUT "County";book$(rec,county)
INPUT "Post code";book$(rec,postcode)
INPUT "Country";book$(rec,country)
INPUT "Telephone 1";book$(rec,tel1)
INPUT "Telephone 2";book$(rec,tel2)
INPUT "Fax";book$(rec,fax)
END SUB
```

The sub routine takes a single parameter, telling it which record is to be updated. Initially, this would be the next free record, starting at 0 and incrementing as the database grows. At a later stage, this parameter could be used to update existing addresses.

Saving new data

So now we are ready to add the data storage routines. As mentioned earlier, the quickest way of doing this is to use APPEND mode. The sub then simply adds the new data to the end of the existing database file without altering previous data. If no such file exists, the OPEN statement will create it. You may want to change the file path. Notice the use of the underscore (_) to allow the splitting of very long lines. This is merely to improve source code readability and has no bearing on the compiled program.


```

SUB SaveNewRecord(rec)
  SHARED book$( )
  OPEN "E:\ADDRESS.DAT" FOR APPEND AS #1
  WRITE
#1,book$(rec,first_name),book$(rec,last_name),_
    book$(rec,address),book$(rec,town),_
    book$(rec,county),book$(rec,postcode),_
    book$(rec,country),book$(rec,tel1),_
    book$(rec,tel2),book$(rec,fax)
  CLOSE #1
END SUB

```

To test the program make sure you have declared all the constants and arrays shown earlier and call the DataEntry and SaveNewRecord subs. You will find the complete test routine on the Reader Disk.

Loading the database file

The next problem to resolve is knowing how many records already exist and which one to pass to DataEntry when adding a new person to the database. The program should start by loading the database file, counting the number of existing records in the process as shown below. The program first checks if a database file exists using the FEXISTS function. If it doesn't, an attempt to read it will result in a crash. Notice that we need to subtract 1 from the counter to get the number of records because arrays always start at 0 and not 1.

```

SUB LoadBook
  SHARED total_recs,book$( )
  STATIC rec
  rec=0
  IF FEXISTS("E:\ADDRESS.DAT") THEN
    OPEN "E:\ADDRESS.DAT" FOR INPUT AS #1
    WHILE NOT EOF(1)
      INPUT
#1,book$(rec,first_name),book$(rec,last_name),_
        book$(rec,address),book$(rec,town),_
        book$(rec,county),book$(rec,postcode),_
        book$(rec,country),book$(rec,tel1),_
        book$(rec,tel2),book$(rec,fax)
      INCR rec
    WEND
  CLOSE #1
END IF
total_recs=rec-1
END SUB

```

The shared variable total_recs now contains the number of records in the current database, so the program should increment it after adding new data. The relevant program portion follows:

```

DataEntry total_recs+1
SaveNewRecord total_recs+1
INCR total_recs

```

User choices

Now that we can load, save and update the database, it's time to give the user some options. After the program has loaded the database it should give the user two choices – one is to enter new data, the other allowing the user to search the database. The last option is to simply quit the program, but otherwise the main part of the sub just loops. A simple multiple choice interface can be implemented using INPUT. The program code below demonstrates how this can be done and includes a dummy Search sub.

```

SUB Search
  BEEP
  PRINT "Search not available..."
END SUB

SUB UserChoice
  SHARED total_recs
  STATIC a$
  DO
    PRINT "Select you choice"
    PRINT "1. Search the database"
    PRINT "2. Enter new data"
    PRINT "3. Quit"
    INPUT a$
    IF a$ = "1" THEN
      Search
    ELSEIF a$ = "2" THEN
      DataEntry total_recs+1
      SaveNewRecord total_recs+1
      INCR total_recs
    END IF
  LOOP UNTIL a$ = "3"
END SUB

```

Data entry via a TOS interface need not be difficult to use. Over the next few months, the data entry form will develop to allow for a variety of options, including modifying existing records.

When compiling programs that contain large arrays it is useful to change the settings in this dialogue box to a higher value than the default 30K.

User options are at the centre of any application. While a GEM user interface maybe easier to use, it is not that easy to program.

Next month...

In the next tutorial we will add the most useful routines to the database, allowing the user to search it and retrieve data from it. Until then feel free to send in your questions and comments.

New commands

DEFINT a-z: This instructs the compiler to default to using integers unless you explicitly use &!, Or # to indicate otherwise. You can use this option in most programs.
CONST: Defines a constant which can be used later in the program instead of a number. This makes programs easier to read and update.
STATIC: Defines a temporary variable inside a sub routine which is not visible to the rest of the program.
FEXISTS: A function used to verify the existence of a file prior to reading from it.

Nice and EZ



EasyFed up with backing up to floppy, or having no way of transferring those large DTP files to your local printers?

Kevin Beardsworth looks at the EZ-135.



The Syquest EZ 135 Drive is the latest in a line of affordable removable media drives to enter the market place. It comes well-packaged in a box claiming to contain "everything you need to get up and running". This is true if you intend to bolt it onto a PC or Mac. But what about an Atari?

Gasteiner correct this short sightedness by supplying a Toplink adapter. This is a device that translates ST ACSI hard drive commands into SCSI commands. You now have everything required to plug the Syquest into your ST. The Falcon doesn't need this device of course as it is already equipped with a SCSI port, something that saves Falcon owners £50.

You'll be able to put that money towards the software. Yes, that's right. The only software supplied is again aimed at the PC user. HD Driver is best suited for this type of drive as it fully supports removable media devices though Atari's software will format it as an ordinary hard drive. Unfortunately, Gasteiner didn't supply instructions for either the drive or the Toplink although the PC-specific instructions should be enough to let you get the drive up and running.

The drive certainly means business. It comes in a well-designed, good quality shell. It's even equipped with rubber buffers on its sides. Case size is kept to a minimum by providing an external power supply and the weight, a mere three ounces, makes the drive very portable. The pocket-sized cartridge is inserted into

the front which also incorporates the stop button and cartridge lock.

Two lights are also included. One to show power on and the other for drive ready and access. Yet again the designers have positioned the on/off switch at the rear. Alongside this are two SCSI ports and the ID switch. It's set at four and this should be adequate for most Atari setups. The ID can be changed easily with the use of a ball point pen.

Setting up the Syquest is painless, if you already have some knowledge of hard drives. The SCSI connections are not labelled in and out, so the lead can be inserted into either. If the drive is the last in the SCSI chain you'll need to plug a terminator into the empty port. One has been thoughtfully supplied.

Power up

With the Syquest powered up you simply push the cartridge into the drive mechanism. Once you slide the lock over it can be used like any other hard disk. First the cartridge has to be formatted. This can be carried out using Atari's freely available HDX which sees the EZ 135 as any normal hard drive. Once formatted you have 135Mbs to play with and this can be partitioned any way you like.

In speed terms, the drive is no slouch. I tested it against an Upgrade Shop 230Mb drive. Kobold took 37 seconds to copy seven megabytes of data to the normal hard disk. It took 38 seconds copying the same data to the Syquest, a difference undetectable without a stop watch. The manufacturer claims a data transfer rate of 2.4 megabytes per second.

Noise levels are very low. You certainly won't hear the drive if it's

connected to a Falcon – the Falcon's fan will see to that! If connected to an ST you'll hear a few clicks as the drive initialises and during disk access. The motor is very quiet and you'll have to lean at the power light to check that it's on.

You can swap cartridges without switching off your system. All you need to do is press the stop button and wait for the lock to disengage. It's then a case of sliding the lock over to push out the cart as in the earlier SyQuest mechanisms. If the drive is sat low on your desk though you'll find this operation a little fiddly.

Although the majority of computer users will be using a drive like this for data backup or transfer to other systems, there is no reason why Atari users shouldn't use the Syquest as a normal drive. After all the storage capacity is virtually unlimited – extra cartridges can be bought for as little as £18.

Media wars

The Syquest EZ 135 isn't the first affordable removable media drive on the market though Syquest were the pioneers of this type of technology. The most affordable drive of this type up until recently was the Syquest 44. This was a much larger device that took five and a quarter inch disks.

The 44Mb drive was the smallest drive in a family which included an 88 and 200Mb drive. Syquest also developed a drive which took a three and a half inch disk and these drives can be picked up at good prices second hand. Their cartridges though are expensive when compared to the new EZ-135 with a 44Mb one costing about £20. The main competition to the EZ-135, though, is the Iomega Zip drive which takes 100Mb cartridges similar in size to a normal floppy disk.

EZ 135 DRIVE	
Publisher: Syquest UK Distribution: Gasteiner Contacts: 0181 345 6000 Price: £199 - £249 with Toplink	Requirements: Any Atari Pros: Easy to install • fast • quiet Cons: Small fiddly lock • no Atari instructions • power switch at rear.
SCORE: 8	

THE UPGRADE SHOP

TEL 01625 503448

REPAIRS AND FITTINGS

Fully trained engineers for a reliable repair. All jobs quoted for individually (no fixed prices). 48 hour turnaround on most machines.

Long 4 months warranty as standard.

We can fit any of the advertised products to your machine for a one off fitting charge of £15.00. This means that if you require say an upgrade and overscan fitted then the charge is only £15.00

Please ring for an appointment before bringing your machine or call if courier collection is required. Please ensure all parcels collected are adequately packaged.

FITTING SERVICE AVAILABLE ON ALL UPGRADES FOR £15.00

DELIVERY: Small items under £60.00 please add £3 p&p. Large items and orders over £60 add £7 courier charge.

Courier pickup for Upgrades and Repairs £7.

Monday-Friday 9am-5pm.

Technical Support: Tues, Wed, Thurs 6.30pm-8pm

Same day service available for upgrades and most repairs.

Please ring before you bring.

All prices include VAT @ 17.5% but exclude delivery. Orders can be placed by telephone quoting credit card details or by mail order. Please make cheques and postal orders payable to "THE UPGRADE SHOP." 1 year warranty on all products unless stated.

The Upgrade Shop

37 Crossall Street, Macclesfield, Cheshire SK11 6QF



THE UPGRADE SHOP

TEL 01625 503448

MEMORY UPGRADES

FREE DELIVERY

Ste/Mega Ste

1/2 meg	£7.50	2 meg	£42.50
4 meg	£82.50		

STFM T.U.S.

Special limited production offers from
T.U.S. / Marpet Developments

2 meg	£52.50	4 meg	£92.50
-------	--------	-------	--------

STFM Marpet XRAM Deluxe

1/2 meg	£32.50	2 meg	£62.50
4 meg	£102.50		

All kits are supplied with comprehensive fitting instructions, testing software and a FREE disk of useful PD/shareware utilities. FREE technical support is available as is a competitively priced fitting service. Prices shown include VAT at 17.5% and delivery.

HIGH DENSITY EXTERNAL DRIVES

Quality 'metal-cased' external Disk Drive with power supply

High Density drives read/write to both normal DSDD and DSHD disks with fully automatic switching.

High Density (2Mb) Drive with controller	£79.99
High density (2Mb) Drive, no controller	£59.99
Double Density (1Mb)	£59.99

MODEM

T.U.S. 14400 FAX MODEM	£79.00
------------------------	--------

PLEASE RING FOR FURTHER DETAILS

TOS 2.06 SPECIAL

TOS 2.06 kits come with full fitting instructions and TOS manual. Both kits allow manual switching between your old and new TOS for full compatibility.

STE SWITCHER

Version 2. Simple solderless installation	£47.99
---	--------

STF/STFM SWITCHER

Version 2. DIY installation	£57.99
-----------------------------	--------

INTERNAL HIGH DENSITY DISK DRIVE

High density controller module with full instructions	£25.00
---	--------

High density controller and 2Mb disc drive	£58.00
--	--------

SPECIALS

STF/STFM Tos 2.06 + HD Module + 2Mb Drive	£109.00
---	---------

STE Tos 2.06 + HD Module + 2Mb Drive	£99.00
--------------------------------------	--------

MONITORS

All monitors include a Tilt and Swivel stand

TUS 14" Mono monitor for ST series without sound	£89.00
TUS 14" Mono monitor for ST series with sound	£99.00
TUS 14" colour for Falcon (0.28dp SVGA)	£229.00

PARTS

NEW PLUG IN POWER SUPPLY

Includes power socket, switch and pedestal - no soldering

	£32.99
--	--------

INTERNAL REPLACEMENT DRIVE KIT

1 or 2Mb Drive supplied	£39.99
-------------------------	--------

KEYBOARD	£49.99
----------	--------

MOTHERBOARDS (Call for availability)

290 DPI replacement mouse	£9.99
---------------------------	-------

All prices include VAT @ 17.5% but exclude delivery. Orders can be placed by telephone quoting credit card details or by mail order. Please make cheques and postal orders payable to "THE UPGRADE SHOP." 1 year warranty on all products unless stated.

SEE OUR AD ON PREVIOUS PAGE FOR REPAIRS AND OTHER ORDERING INFORMATION.

The Upgrade Shop

37 Crossall Street, Macclesfield, Cheshire SK11 6QF

Telephone/Fax: 01625 503448



THE UPGRADE SHOP

TEL 01625 503448

CHEETAH HARD DRIVES

Complete new range of performance
Hard Drives from T.U.S.Developments.

- Stylish new T.U.V. approved cases systems
- High speed access on large capacity systems
- All systems supplied ready formatted
- Fully expandable systems
- Many sizes and configurations available

PLEASE RING FOR LATEST PRICES AND AVAILABILITY, OR TO
DISCUSS YOUR PARTICULAR REQUIREMENTS

Example Price:

540mb system for STFM/STE £289.00

Includes Link Host adaptor and 10ms Access Fujitsu mechanism

The Upgrade Shop

37 Crossall Street, Macclesfield, Cheshire SK11 6QF

Telephone/Fax: 01625 503448



I would like to order:

Title _____ Initials _____ Surname _____

Address _____

Postcode _____ Daytime Telephone No. _____

I enclose a cheque / Postal Order made payable to The Upgrade Shop for £ _____

or

Please debit my ACCESS / VISA / SWITCH / DELTA (please delete) card by £ _____

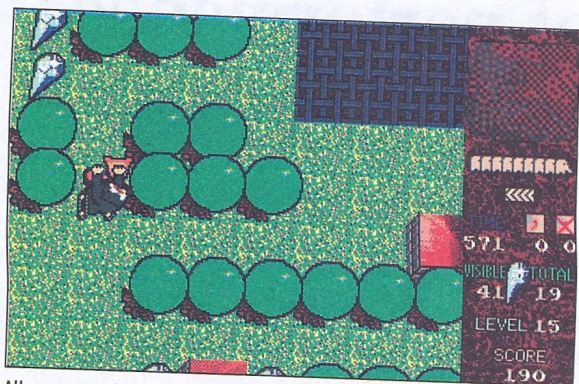
Card No. _____ Expiry date ____ / ____ / ____ SWITCH Issue No. _____

Signature _____ Date ____ / ____ / ____

SEE OUR OTHER ADVERT ON PAGE 29

Alter Ego

Kevin Beardsworth boosts his Ego with a look at this new classic from Goodmans.



All gems must be collected; prepare to dodge the androids!

If there's one thing you can say about the Atari computer, it's its ability to attract classical games. Ego is no exception. Originally a storming success on the Archimedes the writers have decided to port a version to the Atari ST.

Ego comes on one disk with a 6 page manual. There's no useless story background here, just clear basic instructions. Ego is an Elephant. Yeah I know. We've had hedgehogs, frogs, and caterpillars so why not elephants?

The object is to guide Ego around a maze (control is via joystick or keyboard)



Rebuild the face and you're through to the next level - collecting the pieces in the right order can be tricky!

collecting puzzle pieces which must be placed on a central grid to complete a picture of a famous personality. Each level starts by showing you the completed puzzle, it then breaks the puzzle up and hides the pieces around the maze. Simple yes? No!

Each maze is filled with various items to keep Ego from collecting the puzzle pieces unhindered. Androids, running at different speeds from slow to down right supersonic, patrol certain corridors. Their only function is to try and snuff the life out of poor old Ego.

Unfortunately Ego is unarmed so can't defend himself against these deadly marauders. You'd think that would be enough to cope with, but no. Elephant sized holes appear and disappear in your path. With transporters and conveyor belts scattered about too, it's a real hostile

environment. These can be dormant or active and are designed to help or obstruct. You've just got to work out which. Sometimes you need to switch them off by eating a magic mushroom. Just make sure you pick the right one as - in real life - picking the wrong one can give unexpected results.

Keep Ego busy

It's not all bad though; to keep Ego busy you must make him collect all the gems found on each level. Some are clearly visible. Others are hidden inside trees and towers which Ego, being an Elephant, can knock down.

You collect the puzzle chunks by walking over them. The piece you are carrying then appears in a control window to aid you in puzzle construction. Once you are in possession of a puzzle piece all the other fragments rise up so that you can't collect them. They can also block your path so beware. With puzzle section in hand - sorry trunk - you must make your way back to a central grid and place the said puzzle piece in the correct place. Each Ego - you start with three - has nine chances to place puzzles correctly. On the ninth incorrect try he dies. All together... ahhh. For the first 10 levels pressing the help key shows a picture of the completed puzzle. From level 11 you're on your own.

The early levels are fairly straightforward, more of a training session to get you in the mood. Points are awarded for gem collecting (I thought they were ice creams), puzzle collection, finding hidden gems and completing the puzzle. You complete the level when all the gems are in the bag and the puzzle is finished.



Conveyors can only be traversed in one direction. Hint - if you get stuck, look for a hidden exit.

A map screen is supplied should you need it, as well as a stats screen. This tells you the time taken - Oh! I forgot to mention, it's all against the clock - plus puzzle errors and gem pickup rate.

The game is compatible with all STs and it will even run on a Falcon using Backward. Addictive isn't the word, once you start time slips by unnoticed. It wouldn't surprise me if this game kept a few of you up until the early hours.

Graphically it's no master piece but Ego oozes playability. Some of the colour combinations are a bit garish. Remember though, it's aimed at ST owners, so there's not a lot you can do with 16 colours. If you completely mess up a level you can get back to it via a password.

If I've one complaint it's the grating background music. Fortunately this can be switched off at the startup screen. It's somewhat lacking in sound effects too but again it's aimed at ST owners. Perhaps an STe or Falcon enhanced version will appear if this version's successful. Having said that this is one the kids will love - prepare to loose your ST for a several hours.



Publisher: Goodmans
Contact: 01782 335650
Price: £19.95

Requirements: Any Atari ST, colour monitor/TV.
Pros: Very addictive • will keep the kids happy for hours.
Cons: Switch that music off!

Two CD or not...

Denesh Bhabuta looks over a couple of Atari CD ROMs...

Use the excellent GEMView to look at the numerous images on the disk



Electronic Spinster Graphics Clipart CD

The compilers of this Atari specific CD, Electronics Spinster Graphics, have been providing the US Atari community with quality clipart images for quite a few years. Now they have taken their entire collection and placed it on this single CD giving everyone instant access to images for use in newsletters, posters and other DTP documents.

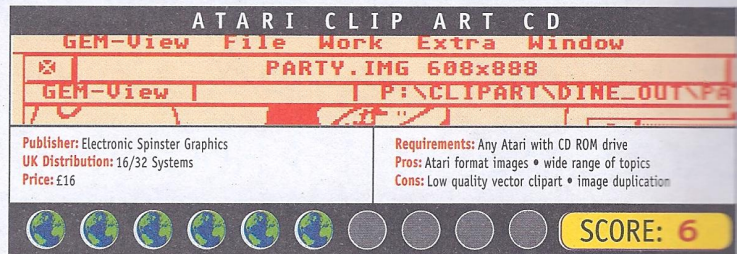
What makes this clipart CD different

from others available is all the files are in the Atari file formats of IMG, CVG and GEM/3. This is not to say that you won't be able to view them on a Mac or PC using appropriate software. Rather you won't have to convert graphics in PC or Mac format before you can use them in your Atari applications.

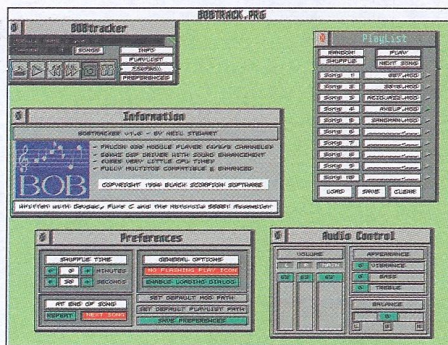
Electronic Spinster Graphics claim to have around 6,000 bitmap images and over 1,000 vector images on the CD. Every category of clipart you can imagine is covered ranging from animals through cartoons and religion to weddings. The bitmap images are of better quality than the vector ones. Spinster mentions that

the vector graphics started life as bitmap images and were converted using the old Avant Vector program. It seems that post-conversion editing was scant. This is a shame as decent vector clipart is thin on the ground. Another niggle is the way that a few of the images have been duplicated in different folders.

The CD comes with around 2Mb of public domain and unregistered shareware software to view and edit the images. Most of it is old but the inclusion of the classic GEM-View is a nice touch. This CD is nothing special but it's cheap and a handy disk to have if you dabble in DTP now and again.



BOB Tracker is one of the many shareware programs you will acquire when you buy the CD.



All Things Falcon

Only a couple of months after the first Falcon-only CD hit the streets out comes another. All Things Falcon contains over 620Mb of files with a huge selection of Falcon specific and compatible software. However 40% of the disk contains generic files such as MOD sound, graphics and animation files which are perfectly usable on the ST. On the plus side, none of the software on the disk requires the use of ST emulators or compatibility software.

Files on the CD are grouped together into specific directories which makes it

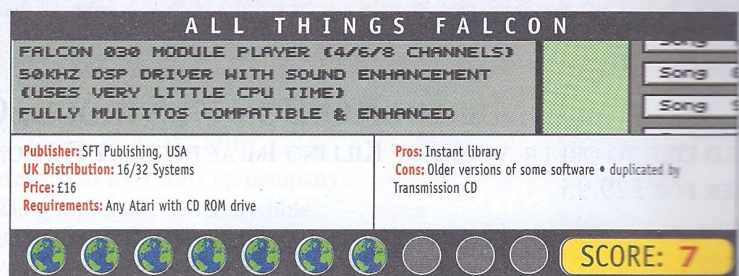
easy to find files of a certain category. A nice touch is the inclusion of 35Mb of commercial software demos ranging from Apex Media to Trakcom. All Things Falcon has a very good collection of Falcon demos, taking up around 130Mb on the CD. However many of the latest demos do not make an appearance - I especially missed the Lost Blubb Demo.

There are tons of shareware programs on the CD and everything you ever need for your Falcon set-up is here from archivers to image processing programs. You must remember though that buying the CD does not entitle you to registered versions of shareware programs, a message which is emphasised by SFT in one of their text documents.

All Things Falcon is aimed at the

home user rather than BBS SysOps as all the files on the disk are unpacked and ready to run. You will also find that most of the programs are in English or are official English translations of German software.

Some of the programs are not current versions for when the CD was produced. However this should not deter you from buying this otherwise good CD which is not only affordable but cheaper than most others in the market. What's more, you will have an instant library of Falcon software to play with and no hassle of trying to find out which programs work and which won't.



KILLING IMPACT



ST FORMAT 85% 'BUY IT NOW!

KILLING IMPACT, A TRUE COLOUR ADVENTURE
ARCADE GAME WITH 5 HUGE LEVELS WITH MUSIC
WRITTEN BY PROFESSIONAL MUSICIANS.

ADDICTION IS YOURS FOR £29.95
OVERSEAS £32.95

REQUIRES A 4 MEG
FALCON, HARD DISK
AND ANY MONITOR



I WOULD LIKE TO ORDER A COPY OF MOONSPEEDER FOR MY FALCON AND ENCLOSE A CHEQUE/ P.O./ CREDIT CARD
NUMBER FOR £29.95

NAME:..... CHEQUES TO BE MADE PAYABLE TO MERLIN

ADDRESS:.....

CREDIT CARD No:..... EXPIRY DATE: .../... SIGNATURE:.....

The 68000

The microprocessor

At the heart of every computer is a processing unit. It is this device that fetches binary instructions from memory, decodes them and then executes those instructions. The overall speed of a computer is determined by many factors with the 'power' of the processor being quite a major factor.

A rough rule of thumb is that the faster the clock speed and the wider the data bus the faster the processor is. Thus in an otherwise identical machine a 33MHz processor will be significantly faster than a 16MHz processor.

Often thought of as 'intelligent' the micro processor is nothing more than a set of logic gates which simply run through a set sequence in order to obey the given instructions. Anyone could act as a processor with a list of instructions and a set of switches to replace the processor. The only snag is that a human could possibly execute 1 instruction per second whereas a fast micro processor could easily execute tens of millions of instructions per second!

As there are many semiconductor manufacturers there are almost as many different types of micro processor. Each family has its own individual advantages and disadvantages which make them more or less suitable for a

specific purpose. Evolutionary trends dictate that successful models survive and improve while poor processors are left behind and eventually die out as their makers neglect them. The 68000 micro was a very successful processor during the 1980s and the early 1990s but as their largest user Apple turned to the Power PC chip so the development of the 68000 has dwindled.

History

The worlds first microprocessor was born just a quarter of a century ago in America. Intel produced the 4004 in 1971 just after the first calculator chip was produced by Texas Instruments. By modern specifications the 4004 was a feeble chip but quite an amazing feat for the early 1970s.

Soon the first micro capable of controlling a 'proper' computer was developed, the 8 bit 8080 and this was to lead the way for quite a few years. The 8080 led to the 8085, the 16 bit 8086 and then the 80186 and 80286. The 80386 jumped to true 32 bit operation and the 80486, the Pentium and now the Pentium Pro have all taken the Intel design to higher speeds and power.

Interestingly the 8080 design was taken by a start up company Zilog who made the incredible popular Z80 (as used in the Amstrad CPC and PCW, and

Sinclair Spectrum). This was far superior to the 8080 and captured a large portion of the 8 bit market. Zilog tried to maintain this momentum with the Z800 and the 16 bit Z8000 but they were never really successful.

The other main 8-bit micros of the 1980s were the 6502 as used in the BBC Micro and the 6809 by Motorola. It was this design that was expanded into the 68000 that powers the ST. Developments of the 68000 have led to the 68008 (a cut down model used in the famous Sinclair QL), the 68010, the 68020, 68030 (as used in the TT and Falcon) and the 68040 as used in the last series of 68000 based Apple Macs.

Modern microprocessors are split into two main camps, RISC – reduced instruction set computer – and CISC – complex instruction set computer. The RISC processors are fast and small with a limited instruction set and the CISC processors are large and complex but have a wealth of complex instructions. As technology evolves the two are coming together again as large CISC processors often have a RISC core and traditional RISC designs incorporate so much extra circuitry in such things as on board cache that they have strayed from the simple RISC idea.

Kick start

Every time an ST is switched on it works, hopefully. The many thousands of instructions needed to get everything working is quite frightening but as long as all is well, it all happens transparently. It's only when things go wrong that these operations need be of concern.

At power on (or when the reset button is pressed) the 68000 is programmed internally to look at the 32-bit address pointed to by memory locations 4-7. (This is held in the GLUE chip and points to #FC0000).

The 68000 then jumps to #FC0000 and begins to execute the code held in the operating system ROMs. This code causes the following actions:

- 1 Output a reset pulse
- 2 Read the word at the cartridge port (#FA0000) if this is a special code allow the cartridge port to take over else continue
- 3 Check for a warm start, initialise the memory controller
- 4 Initialise the sound chip, deselect disc drives
- 5 Initialise colour palettes and set screen address
- 6 If cold start zero memory
- 7 Setup operating system variables in RAM
- 8 Set up exception vectors
- 9 Initialise MFP chip
- 10 Set screen resolution
- 11 Try to boot from floppy then try to boot from hard disc, run boot program if successful
- 12 Bring up desktop

Bombs away!

Every ST owner is familiar with 'bombs' but their meaning has often been shrouded in mystery. Vintage ST owners may even remember the mushroom cloud symbols that were in the old disk based operating system but they were considered insensitive and changed to a more generic bomb symbol. Whenever a problem arises the 68000 tries to work out what the cause of the problem is and then runs a small routine to display bomb symbols in a horizontal line across the screen. The number of bombs can sometimes give a clue as to the problem. Often however, especially with hardware problems all that happens is a seemingly random number of bombs right across the screen - the inference being that it's broken!

The main bombs that occur and their significance are shown here:

Bombs Meaning

2	Bus error - from GLUE chip
3	Address error - tried to read an odd address
4	Illegal instruction - usually bad memory or disc drive
5	Zero divide an illegal operation
6	Check instruction, can be used legally
7	Trapv instruction, same as for 6 bombs
8	Privilege violation - CPU was asked to use supervisor space illegally
9	Trace - used to debug software
10	Line 1010 emulator to allow instruction emulation
11	Line 1111 emulator, see 10 bombs
12-23	Should not occur
24	Spurious interrupt, common for hardware faults
25-31	Autovector interrupts

The 68000 family

As the 68000 was such a popular processor, the design was also copied and produced by other companies, such as SGS-Thompson and Hitachi. To distinguish their products from Motorola they were often faster or cheaper whilst retaining 100% compatibility with the original design. The base 68000 originally ran at 8MHz (as in the ST) but as the chip was shrunk in size later versions could run at a rated 25MHz (33MHz if pushed!) Similarly the original 68000 was only available in a monster 64 pin DIL package, the familiar 'Mars bar'. To save space the chip was then re-packaged in a 68 pin PGA, a 68 pin LCCC and 68 pin PLCC square package as used in the STe.

The later upgraded models had larger buses and so were only available in PGA and PLCC packages, the size of a DIL version would have been unusable. buss

68000

The original 68000 had 32-bit wide internal data registers but only a 16-bit external data bus, the address space was similarly limited to 24 bits which allows up to 16Mb of memory. This was of course an almost infinite capacity at the time but this omission was removed in the later processors.

The Mega STe, a rare but nice machine, also used the 68000 but this time clocked at 16MHz, a large cache allowed significant speed increases over the base STe even though the rest of the machine only plodded along at the original 16MHz.

68030

The TT was the first Atari to use a high end 'workstation' processor and ran at 32MHz. The processor itself has a 32-bit wide data bus and 32-bit addressing thus allowing memory capacities of 4GB, still plenty of space even today.

As main DRAM memory was not fast enough to keep up with

such fast processors a small cache memory was integrated into the chip's design. The most recently used instructions are kept in this cache and if present they are used immediately without having to wait for the main memory to fetch the data. Whilst this idea is sound, the 68030 cache is very small (256 bytes) and often does not contain the relevant data and so the system slows down significantly.

Floating point units

Microprocessors are optimised to work well with integer numbers, operations on real numbers have to be calculated by very long winded slow routines made up from multiple simple instructions. The real world operates mainly with real numbers and so any thing that can speed up handling real numbers (floating point e.g. 134.5678 or 8.6756) is beneficial. To achieve this aim the semiconductor designers came up with a hardware solution, these floating point units are a complex chip (often as complex as the main processor and in a similar package) which takes over from the main processor whenever a floating number is processed. A good FPU can speed up floating point operations by at least fifty times!

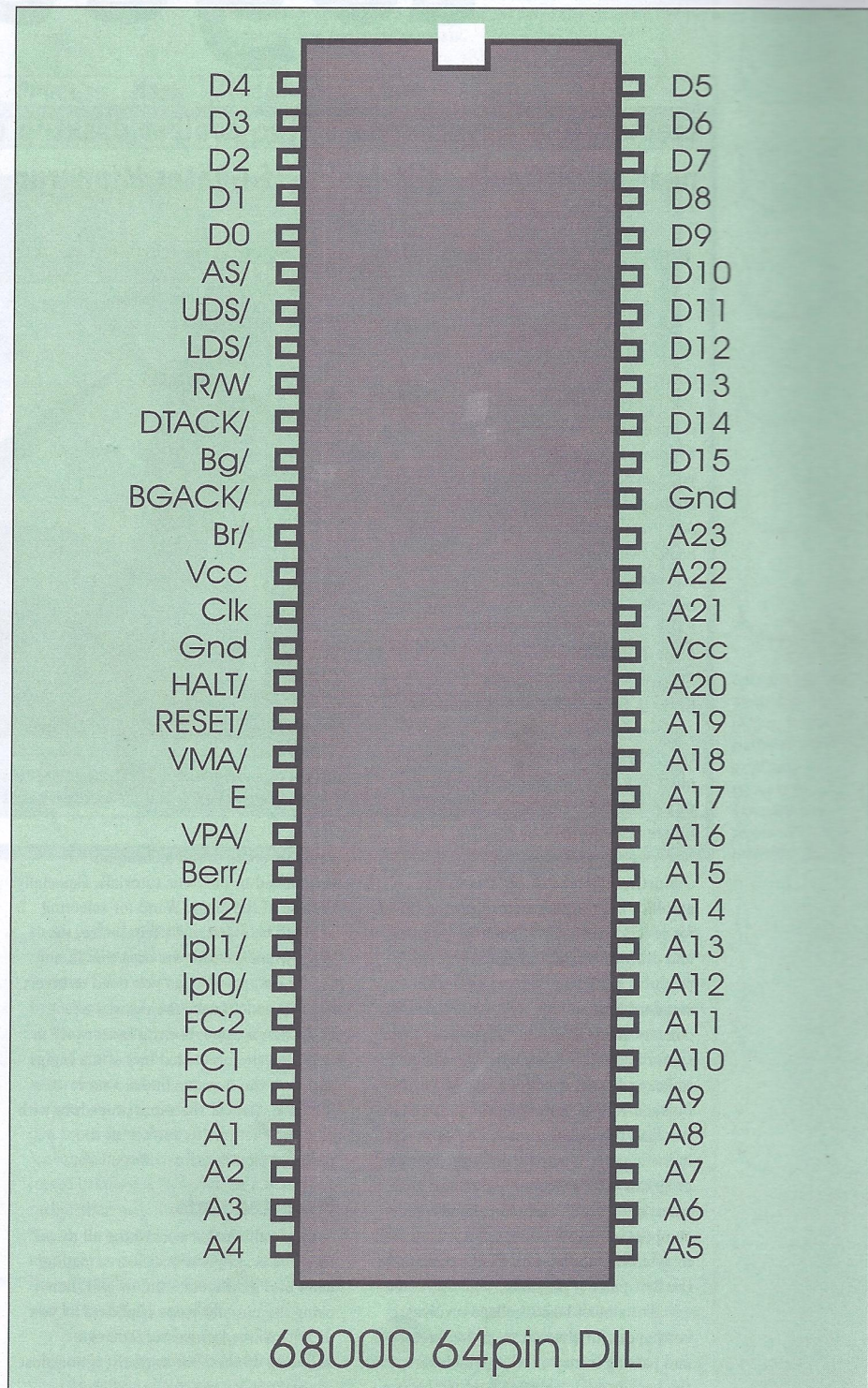
The original 68000 processor had a FPU termed the 68881 but was not readily available for a base ST or STe. The TT had the big brother FPU, the 68882 fitted as standard whereas the Mega STe and Falcon can have an optional 68881/68882 FPU plugged into the waiting socket.

The downside of this is that when programs are compiled they have to be compiled specifically for a machine with a FPU in order to benefit from the extra hardware speed – as most machines don't have an FPU so most programs have not been compiled for them and so there is no speed increase at all obtained by fitting an FPU. Potentially the programs gaining the most are CAD packages and spreadsheets – if support is there then the improvements can be dramatic.

The ideal solution is a second level cache between the processor and main memory of around 256K but Atari did not see fit to implement this and so the TT never delivered its true promise in terms of power.

The Atari Falcon also uses a 68030 but this time clocked at just 16MHz so the need for a large cache is greatly reduced.

The 68000 processor



Putting it together

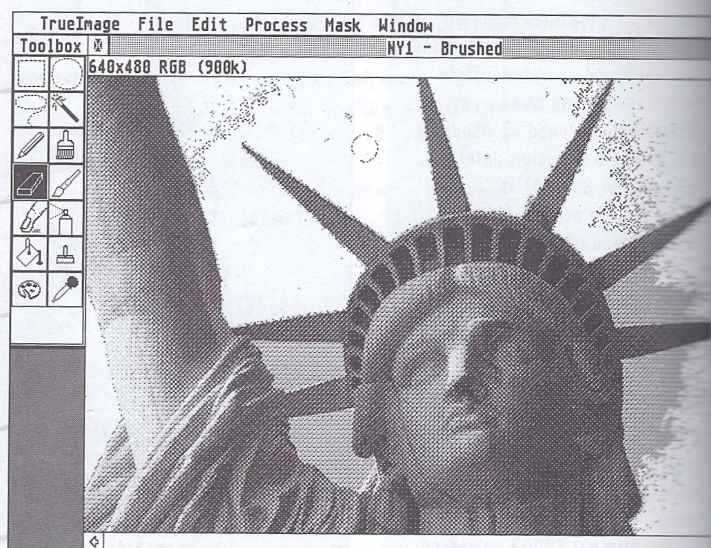
Electronic collage is one of the coolest desktop design tricks, and now it's as near as difficult as it looks. If Günter Minnerup can do it, so can you.

It is all very well to lighten dark scans and apply global filters, but image processing software really comes into its own with somewhat more demanding tasks such as collages. A recognised art form since the 1920s, collage involves the combination of elements from one or more pictures, often with text thrown in for good measure. If you feel confident enough in your artistic abilities, freehand drawings can be added too. From simple logos and letterheads to book covers and full-size posters, collage is one of the main techniques in the design business.

File formats

Since the various elements of a collage are likely to be derived from a variety of sources – scanned photographs, vector type, object drawings, you name it – it is obviously desirable that your image processing program supports as many different file formats as possible. The heavyweight packages incorporate sophisticated features such as vector graphics import and vector drawing (ideal for precise masks and “guiding” painting and drawing tools), but the more basic products can't handle more than the standard bitmap files so you may have to convert everything first. When converting vector drawings to bitmaps, you will have to keep in mind the likely size of the finished collage: enlarging the bitmap later can lead to unsightly results because the individual pixels simply get bigger. Some programs offer rescaling algorithms that insert additional pixels to try and compensate for this effect, but it is as well to avoid the need for extensive resizing in the first place if possible.

At its most basic, collage involves cutting out an element from one picture and pasting it into another which serves as the background. This is where we begin to



The sky blue background to the Statue of Liberty is easily selected, using the Magic Wand, and the rest of the picture masked so that the background can be eliminated with the Eraser tool.

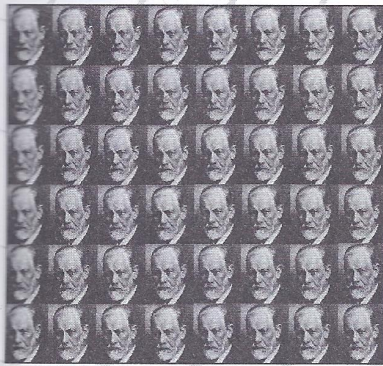
combine some of the techniques introduced in previous tutorials, especially the use of the Magic Wand for selecting areas to be masked. In TrueImage, the Magic Wand defines the area that is not, repeat not, masked, so you need to invert the mask to achieve the desired effect. Once this is done, use the Eraser tool to delete all the unwanted bits of the image and save the remains under a new filename. Repeat the same procedure with all other pictures to extract all the required elements for your collage.

Protected parts

You may think that combining all these into one is simply a question of loading each into a different window and then using the cut-and-paste clipboard as you do with a word processor. You can certainly do this, but in many, if not most cases straightforward cut and paste is

unlikely to do what you want: all it does is overwrite the existing picture with the current contents of the clipboard. At the very least, you will want to protect certain parts against being overwritten, thus effectively pasting the clipboard contents “behind” the protected parts. This can be achieved very easily by selective masking to make sure that the Paste operation only affects the unmasked areas.

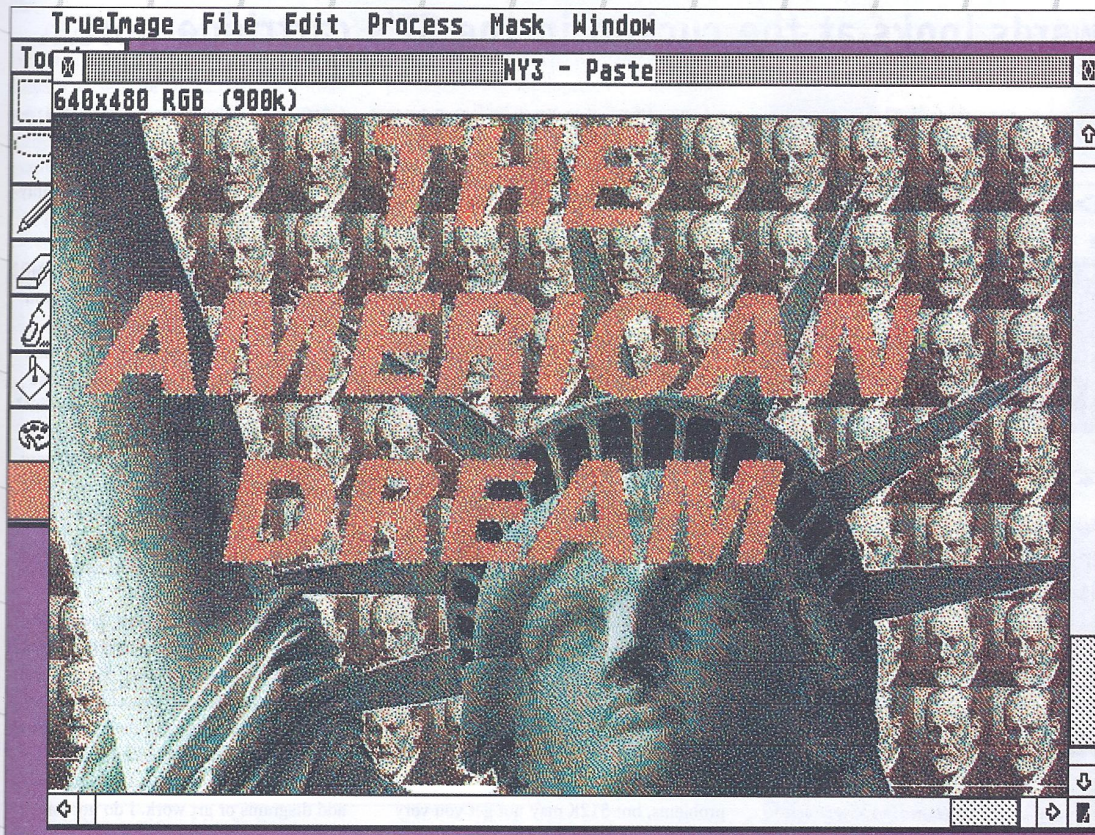
Very often, however, far more sophisticated methods of combining two pictures are required, for example to blend in the clipboard contents in such a way that the original background still shines through. To do this, you do not want the pixels from the clipboard to replace the original pixels, but to interact with them in different ways. All image processing programs offer something like this – to varying degrees of sophistication – and in TrueImage these functions can be found



A simple background pattern can be created by repeated cut-and-paste. This pattern was then pasted into the first picture, protecting the actual Statue of Liberty with a mask.

THE AMERICAN DREAM

The text was knocked up in a DTP package and saved as a greyscale TIFF file using Imagecopy, ready to be imported into TrueImage as a mask.



Once the text mask is overlaid over the picture, it is a simple matter of selecting a paintbrush tool and a colour to fill in the unmasked letter shapes with a few bold brush strokes.

under "Combine" in the Edit menu. Four different options are available: the brightness values of the clipboard and destination pixels are added together, subtracted from another, multiplied with each other, or, finally, multiplied after being inverted. A little bit of experimentation will soon show you the visual difference between these options.

Text elements

These simple techniques are all that is needed to knock up some simple collages like the one shown in the screenshots on these pages. But what about text? Since the cheaper image processing programs cannot handle text fonts directly, you need to generate any textual elements in a wordprocessor or DTP package and save

them to disk as bitmap graphics files – most DTP programs offer IMG or TIFF "printer" drivers for this purpose. In most instances, however, it is quicker and easier to use a screen capture utility – Imagecopy is by far the best – as this gives you visual control over exactly what portion of the screen you wish to use. The file format can be of crucial importance if the screendump is to be imported into your image processing program as a mask rather than as a normal picture: while DA's Repro, for example, saves its masks as monochrome IMG files, TrueImage likes them to be TIFF greyscales, so make sure you know what is needed.

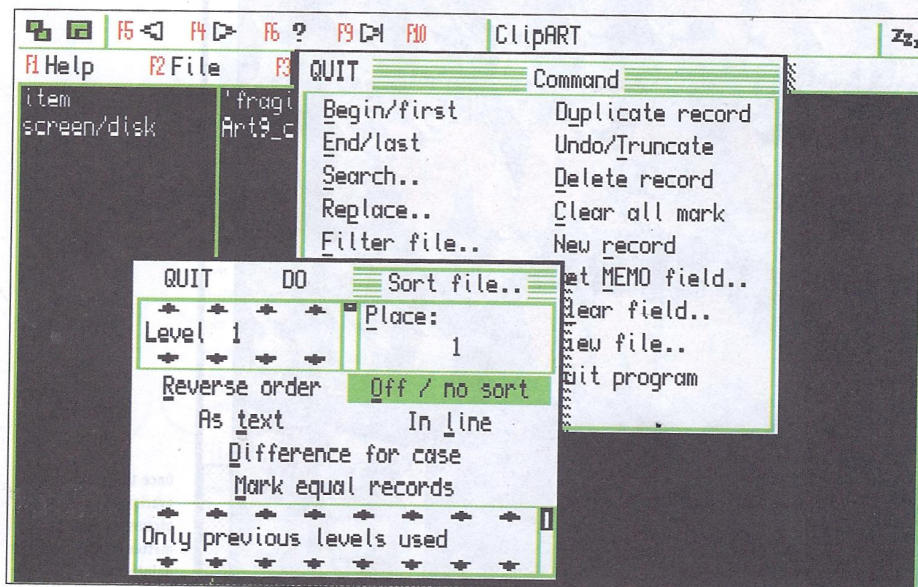
Importing text as a mask has the advantage over normal cut-and-paste that you can then use the letter shapes as

"stencils" to cut out bits from the picture, or to apply whatever painting tool in whatever colour and opacity (the degree to which it obliterates the background or lets it shine through) to either the letters or everything else (after inverting the mask). On the other hand, importing it as an ordinary graphic allows you to edit it before letting it loose on your collage: all depends on what you intend to do really.

These simple methods have not yet exhausted the subject of collage, however, far from it. The painting tools, and especially the Stamp tool – which, as you may remember, lets you "paint with a picture" – have a substantial contribution to make to the subject too. Such more sophisticated techniques will be the subject of next month's piece.

SMS2

Mike Edwards looks at the cuckoo in the ST's cartridge port...



DataDesign, a powerful, easy-to-use database.

At first glance, £135 seems to be a high price to pay for a cartridge with a cheap label and a manual so thin you could use it to sandwich an ice-cream. But appearances are deceptive; the operating system inside the cartridge is worth every penny, and though the cartridge may look flimsy, the major advantage in using an EPROM cartridge is that it can be reprogrammed easily.

Booting under SMS2 is fast - much faster than normal on your ST. A range of useful accessories (and not just six, by the way) can be set for boot time, such as a date/time indicator, a free-memory indicator, a calculator and so on, all of which are shown as a row of buttons at the top of the screen.

The SMS2 multitasks very efficiently, but it will do so only if you have enough memory to run more than one application at a time. With a 4Mb Stacy I have no

problems, but 512K may not get you very far. A hard disk is a big advantage, too.

Friendly

Despite the apocalyptic tone of the advertising ("The dawn of a new era"), the SMS2 works quite brilliantly - and in some respects better than the native ST. It is very hard to "crash" SMS2; you will certainly see no "bombs". If you get stuck with an application, you can usually delete it or turn to another without the need to reboot the system.

In general, SMS2 is the friendliest and easiest operating system you could wish for. It puts you in control - you can change the boot file with which SMS2 is shipped, add a user file of additional commands or have your utilities loaded automatically. Anything can appear on screen as a button and applications use windows that can take up as much of the screen as you want. All programs remain active once

loaded; switching between them is simply a matter of moving the pointer to the relevant window.

The Pointer Environment is the SMS2 equivalent of the desktop on an ST - you use the mouse or trackball to move a pointer to whichever operation you wish to access, and "click" on it. Both mouse buttons are used: the left button is a "hit" button and merely highlights; the right button is the "do" button. SMS2 software tends to use standard controls, and so is easy to get to know. Hotkeys are a standard feature and are used to select a range of key presses that automatically call up specific applications.

SMS2 not only loads fast, it accesses disks fast too. In practice, multitasking has close links with speed. I can, for example, develop a spreadsheet, export it to a text editor for tidying up, and then read it into a WYSIWYG word processor for pretty headings, or read it into a DTP program to add diagrams or art work. I do not have to load each program in turn: I simply switch from one to the other - fast and flexible.

Software

Pointer Environment programs include QD, a handy text editor, and QSpread, a simple spreadsheet. There is also LineDesign, a vector drawing package, an early version of which came on 11 disks!

DataDesign is a rare thing: an easy to use free-form database handler with multi-line fields of variable length. The field names, for example, are merely the first record you type in and can be amended or added to at any time.

Text87 is a major keyboard-controlled program, a fully functional word processor capable of producing first-class output. This can stand comparison with Redacteur or Protex. It's WYSIWYG (after a fashion) but if you want proper DTP, Text87 and LineDesign work together to constitute an

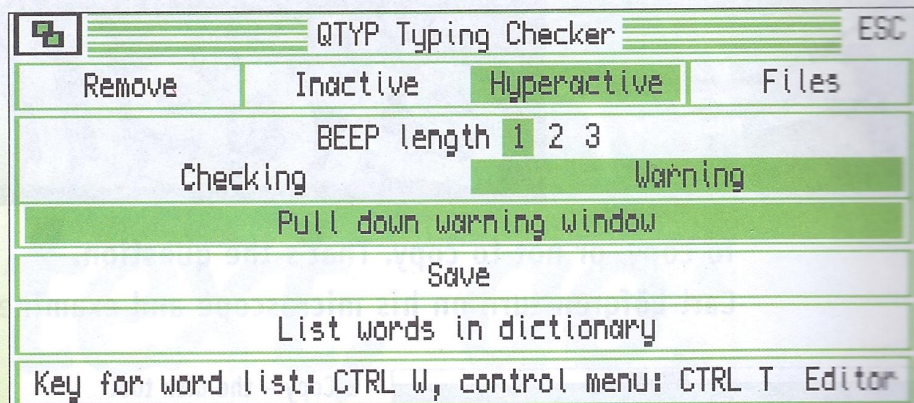
excellent package with more fonts than you can find time to use.

Perfection is the main rival for Text87, developed as a replacement for the old Quill word processor bundled with the Sinclair QL. It's less sophisticated in terms of display and output, but many users find it more flexible, faster, and easier to use. One of its important virtues is that it can handle vast documents with no perceptible loss of speed.

Since so much of the software is text-based, there is a good spelling checker - QTyp, which can be used either for checking as you type or with an existing file.

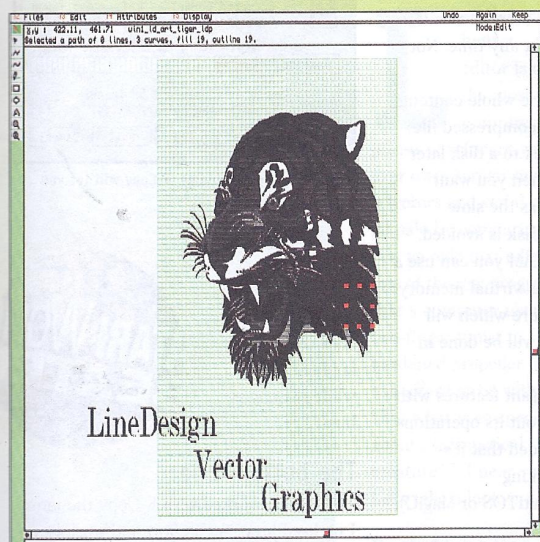
On the games side there's Black Knight, a chess program, playable public domain versions of Othello and Four-in-a-row and a just-about-playable version of Mahjong. To be brutal, though, if you want games you'd be much better off sticking with the ST!

If SMS2 catches the public

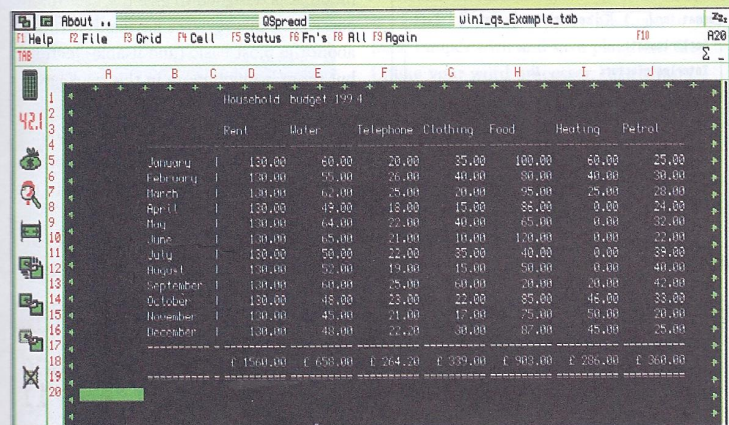


QTyp can spell-check either on-line or with an existing file.

imagination, we could see many exciting packages being developed in the next few years to make full use of the power and facilities offered by its radical concept. I, for one, would love to see this fledgling turn into an eagle...



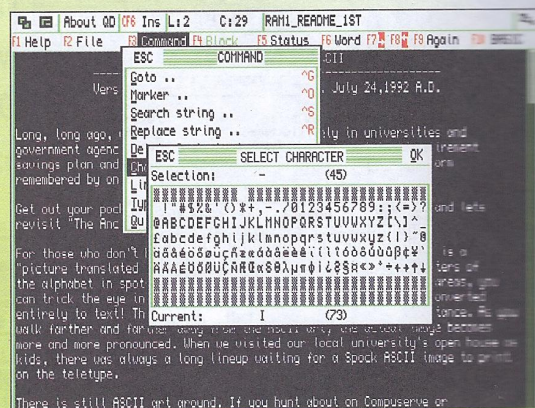
Vector graphics, courtesy of LineDesign...



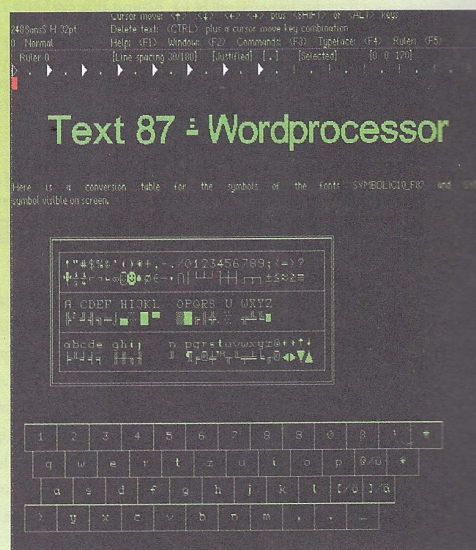
If you need a spreadsheet program then QSpread fits the bill.

Sorry!

Sorry about the quality of the screenshots but one thing SMS2 clearly needs is a good screen capture program. I wonder if Jeremy Hughes feels like porting Imagecopy...



For text crunching, there's either the very basic QD...



... or the more up-market Text87.

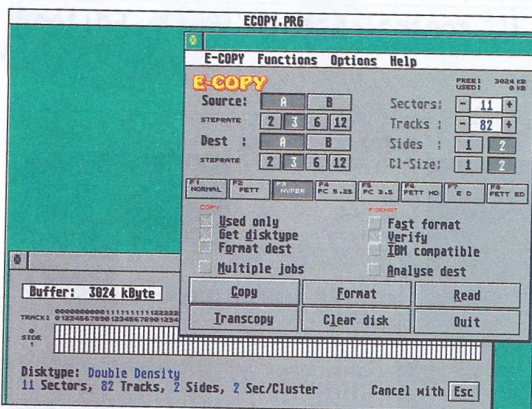
Contact

Furst Ltd, Delta House,
Garfield Road, Bishops
Waltham, Southampton SO3
1AT. Tel: 01489 894674 or
email at
furst_uk@delphi.com.

E for excellent!

To copy, or not to copy. That's the question.

Carl Löfgren turn on his microscope and examines E-Copy.



E-Copy is one of the latest copy utilities from Germany.

E-Copy is one of the latest imports from Germany. The first version appeared in the middle of 1992 and development is still very active.

The latest version is v1.72 and it was released 8th of May 1995. The Copy Disk function works exactly as expected, so no nasty surprises here. The Transcopy function, however, is a much more interesting tool, as it can copy data into different formats to the source disk. There are no problems when transferring data from, for example, a double sided HD disk onto a single sided DD disk. If there's not enough room on the new format for the incoming data E-Copy will let you know. E-Copy supports both DD and HD disks, and surprisingly it even supports the 2.88MB ED drives!

It's also possible to copy non-TOS disks (such as Spectre) with E-Copy. In that case you must know the correct format (how many tracks and sectors the disk was formatted with).

As in most modern copy utilities, the formatting is done backwards. Why? Security reasons. The first tracks on the disk are the most important ones (the FAT and the bootsector are found there), and if you by accidentally insert one of your most important disks, it just might be possible to rescue the disk. Clear Disk, wipes the first tracks of the disk. This only take a second or two, and as there are no FAT available, the computer believes the disk is empty. Naturally this doesn't work on non-formatted disks.

E-Copy – the disk tool

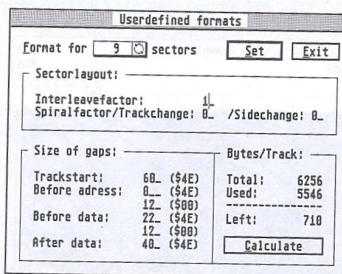
To avoid the infection of viruses, E-Copy automatically examines the boot sector each time a disk is accessed. Currently it recognises 15 of the most well-known viruses, which should be enough for most cases. This feature can be turned off.

E-Copy also offers the user the ability to store boot sectors as files, which can be rewritten to disks during formatting. There are 12 boot sectors included in the package (mainly anti-viruses). This feature, would have been more usable if it could write boot sectors at any time. Not just during formatting.

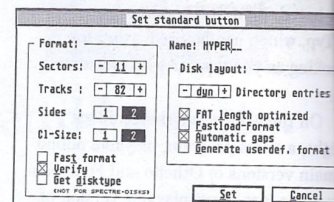
You can also store the whole contents of a disk to one single uncompressed file, which can be written back to a disk later on. This is very useful when you want multiple copies of a disk as the slow reading from the source disk is avoided.

If you are short of RAM you can use a hard disk (or FastRAM) as virtual memory. This is a very handy feature which will make sure the operation will be done in just one pass.

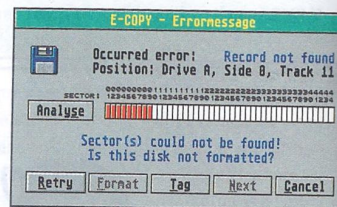
One of the most elegant features with E-Copy is that will carry out its operations in the background (provided that it's running under a multitasking environment, such as MultiTOS or MagiC).



Why not create a new format?



You can store up to eight different format settings, which can be called with the Function keys.



If there are any problems, E-Copy will let you know.

Unfortunately it's not possible to start or quit any applications while E-Copy is busy.



The bottom line

The more I worked with E-Copy the more I realised how much effort and work lies behind the program. Each and every function is designed to give the user total control. In this review I have only written about the most basic (and usable) features, but there is much more in this package to discover.

E-Copy is a very powerful disk tool, that runs either as a desk accessory or as a program. The option to format disks in the background under a multitasking environment makes it the most advanced copy utility so far on the Atari platform.

E - COPY V1.72

Occurred error: Record not found
Position: Drive A, Side 0, Track 11

UK Distribution: System Solutions
Contact: 0181 693 1919
Price: £29 (still to be confirmed)
Requirements: Any Atari, ST high resolution or higher

(640x400 pixels).
Pros: Fast • loads of features
Cons: Pricey • restrictive resolutions

SCORE: 9



Stick a boot in it!

Bello and welcome to another ST Source. Having made it through eleven issues' worth of essential hints and tips I'm not sure we can think of you as "absolute beginners" any more, and so this month we are looking at two types of programs that can help to streamline that already sleek ST of yours.

First up is text editors. Do you want to know what a text editor is and what it can do for your system? It's all here and again we've plucked the best from the market and given them the review treatment.

Second on the menu is the not-so-humble boot manager: we've all suffered from congested AUTO folders and a surplus of desk accessories, and this is the solution. Along with the whys and wherefores, we've had a good rummage through the different programs and bring you full reviews of the top four. And as always, the technical details are backed up with practical examples for you to follow.

As always, if we've left any questions in your mind, feel free to send them in to Q&A. Until next month, live long and prosper.

Your humble servant,

Nial Grimes, Features Editor

Marks, get text, go!

Edith Professional, Everest and company cover in the corner of a room strewn with conquered ASSIGN.SYS files. Yes, Nial "I am the law" Grimes is here to explore the potential of the humble text editor...

Let's be perfectly honest – a text editor is one of the most uninteresting pieces of software you will ever own; screen savers, file selectors and serial patches all pale by comparison. And yet, ye olde text editor is one of the few programs that a computer user, from two-finger typist to hardened propeller head, can afford to be without. "But what is so special about this mystical creature?", I hear you cry. Let's take a look...

Back to basics...

To start at the very beginning, a text editor is a piece of software that allows you to load, tamper with and save plain text files. Unlike your word processor, text editors care not for styling (such as underlining or italics) or character spacing – they deal purely with ASCII (plain) text.

But what, you may wonder, is the point of editing pure text? – Surely your bank manager is going to be far more impressed a few nice fonts and some fancy spacing. That may be the case, but text editors are not designed for pretty output – they specialise in electronic information. At a basic level you can use them to prepare documentation for distribution in the public domain – most of the "read me" files you see scattered around disks are produced in this way.

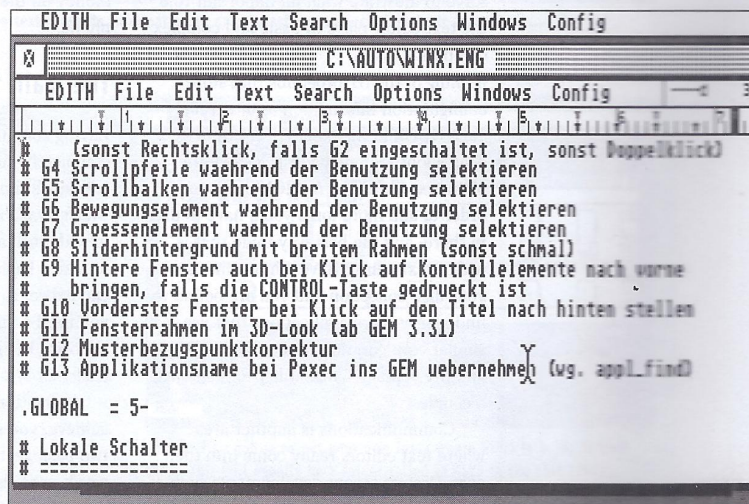
Power to the people...

True, up to this point, you could get away

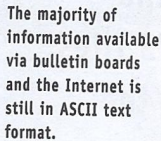
with using a word processor. However, the further you progress down the computing path, the more uses you will find for a text editor. Take programming for instance – writing C or assembly language demands a good editor. While commercial packages often include their own, when you descend to the public domain you are usually expected to mix and match.

This is also true of the public domain POV-Raytracer. Many novices get involved with POV simply because it's free, and you can make the encounter much more amenable with the help of a shareware shell program and a tightly linked text editor. In this way an example file or two can be kept open with your work, alongside the manual, for reference.

And now that the ST is Internet ready, you'll also find a use for an editor in setting up your own World Wide Web pages. The HTML language may look complex at first, but it's very easy to pick

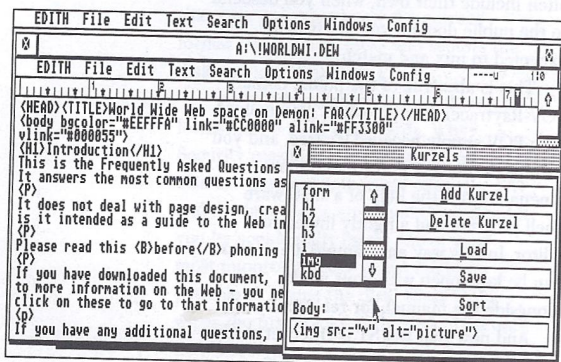


Plain text configuration files are common amongst PD utilities.

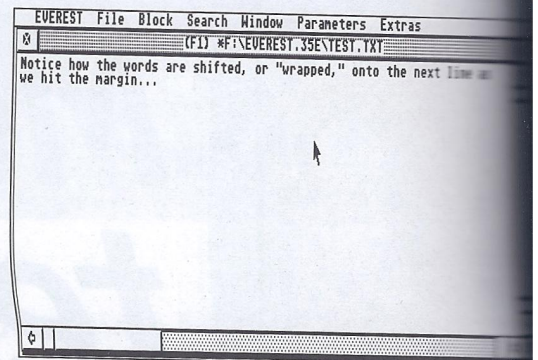


up and Edith Professional and Everest even stump up some help in the form of "kurzels", but more on these later. As an ST Source reader, you may not even be considering getting involved with programming at this point, or the Internet for that matter, but these examples should serve to illustrate what an important role the text editor plays in basic and complex computing tasks. And that's to say nothing of the ST programs that store configuration information as a text file. Take GDOS for instance. Every time Atari's font system loads, it looks for a plain text file called ASSIGN.SYS - in order to add more fonts you'll have to dive in there, and the best way to do that is with a text editor. Have a hunt through your disk collection and you are bound to find plenty more applications that use similar configuration files - the desktop and the popular WinX utility to name just a couple.

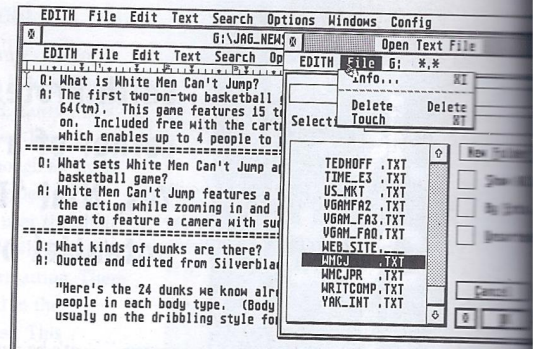
Communications is another area where text editors really come into their own. Despite recent developments such as the World Wide Web, the vast majority of information distributed via bulletin boards and the Internet is pure text. These same files often find their way onto public domain disks and if you want to publish or read any of this information a text editor is your man. They are also an essential add-on if you are involved with bulletin



Everest and Edith can use kurzels to ease the writing of HTML files for the World Wide Web (hypertext via a modem).



Word-wrap and block handling facilities are to be found in most text editors.



Be sure to choose an editor that runs well on your ST - Editor Professional's interface can tax slower machines.

The main feature...

Having convinced yourself that life is completely meaningless without a text editor, it's time to go out there and see what's available. However, before we jump in with both feet, it's probably a good idea to take a look at the type of features you can expect to find – after all, deciding that you need a text editor is the easy part; choosing the right one is a little more tricky.

No matter what you are aiming to achieve, you should look out for one or two basic features. Word wrap (shifting words onto the next line when they stray past the margin) and block management (such as cutting, pasting and moving) are pretty much essential. However, equally important is the manner in which they are implemented – if you are eager to add extra fonts to your ASSIGN.SYS file, there's little point in worrying about irregular blocks or drag and drop editing; however for communications freaks, both of these could be a real boost.

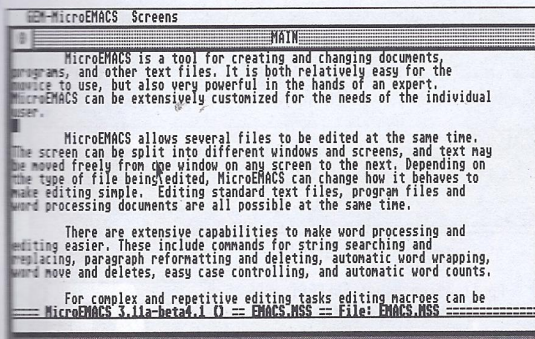
Choosing the right editor for your machine is equally important. Edith Professional looks fantastic, but unless you've got NVDI or some other screen accelerator installed, it can be a little slow, cancelling out some of the benefits of using a text editor in the first place. Nevertheless you may find that the power of the program makes up for the deficit in raw speed. The vast majority of text editors available for the ST are public domain and therefore you can afford to try each until you are convinced it suits the job in hand and runs well on your hardware.

Extra, extra!

The above features will see you happily through almost any computing task, from replying to an e-mail through to kicking WinX into shape, however the talents of modern text editors extend much further. Nice touches such as font support and stylish GEM interfaces are common and you'll also find features that, while not essential, are extremely handy for certain applications. Take Edith's ability to grab independent columns of text and paste them elsewhere, reformatting if necessary.

Macros are another case in point. If you often want to search through a text file looking for the word "span" then it's handy to be able to "record" yourself doing it once and then simply summon the macro to do it for you next time. MicroEmaacs takes this ability to an extreme, and includes its own programming language – if it involves text you can do it with MicroEmaacs, but be prepared for the fact that you could die in the process!

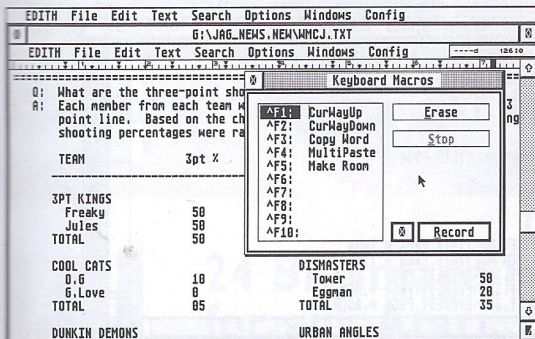
Slightly more practical for the rest of us are Edith's and Everest's "kurzels". In simple terms they allow you to attach a mini-template to a key-press. Standard kurzels for the worldwide web's HTML language are included, but you could equally easily add the standard elements for an e-mail, inserting "Dear <blank>" or a text "signature" at the press of a button.



MicroEmacs includes a powerful macro language that can perform almost any task, given enough sweat and tears.

Let me at 'em!

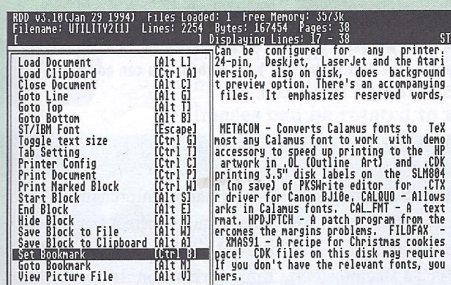
The advantages of text editors are obvious – they dispense with the unnecessary baggage carried by word processors, add the features you need to deal with complex, text-intensive jobs and still manage to function happily on a one megabyte machine. You're impressed, I can tell, so turn the page and let's get down to selecting some software...



Frequently performed tasks can be automated with the help of Macro facility.

View to a kill...

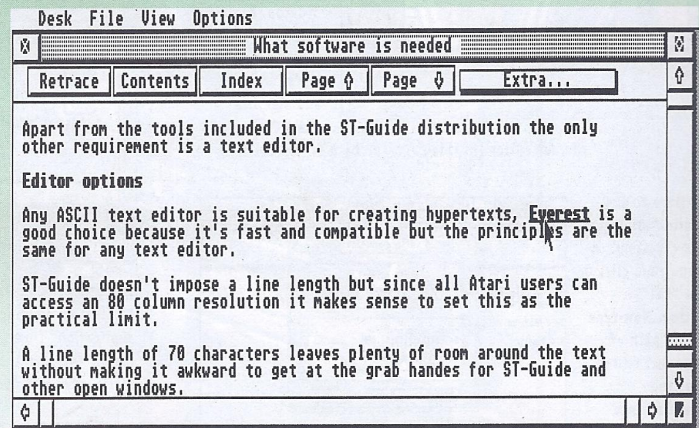
If you find yourself "viewing" more text files than you actually edit, you might like to take a look at the Revenge Document Display system – a truly lovely application that specialises in ASCII display. The main benefit you reap is speed – Revenge is suicidally nippy at times, movement up and down the document being controlled via the mouse. Added to that you'll save yourself some memory and can expect features more in line with display than editing – bookmarks spring instantly to mind. Demon search facilities are also on hand to wheedle out key phrases, again at a terrific speed. The only problem with Revenge is that it completely ignores the ST's GEM interface. If you prefer the "windowed" approach you'll probably want to give MasterBrowse a quick run around the block.



If you can live without GEM windows, Revenge is the very best way to display text.

Hyper, man!

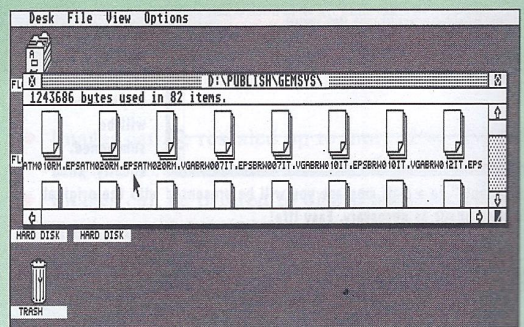
From time to time you'll come across a program with a "hypertext" help system. Basically this means that keywords within the text will be highlighted and will take you to another point when selected. For instance, clicking on the words "Atari World" could summon a profile for the magazine or even subscription details. Some commercial programs, such as Outline Art 3 include their own help systems, but the majority of public domain hypertext help files are prepared for use with an accessory called ST Guide. And guess what you'll need if you want to put together your own hypertext pages? – That's right, a text editor! ST Guide uses tags not dissimilar in style to HTML, and with the help of some Edith or Everest "kurzels" you can put together your own hypertext documents in no time.



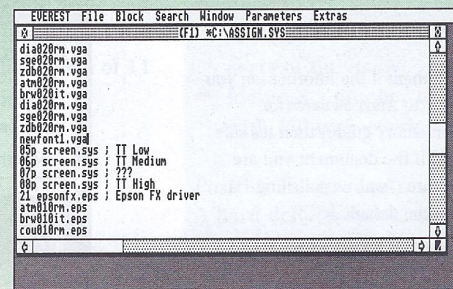
Hypertext presents information in an interactive way – click links to learn more...

Assign of the times...

One of the most common uses for a text editor is fiddling with configuration files such as GDOS' ASSIGN.SYS. Let's add an extra bitmapped font to Timeworks 2 with the help of Everest...

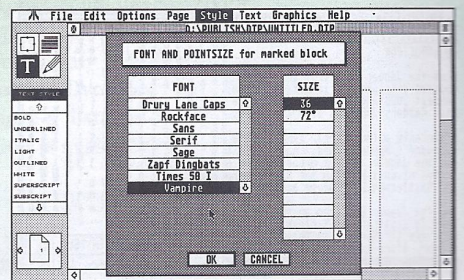


1) Your first job is to put your new fonts where GDOS is going to find them. This will usually be a folder called GEMSYS in the root (top) directory of your Timeworks disk or in the same folder as the application itself on a hard disk.



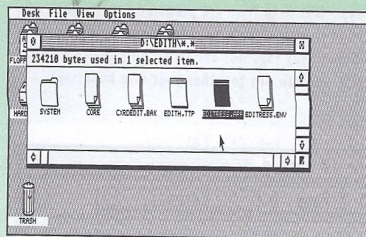
2) Load up Everest and find the ASSIGN.SYS file (this is always in the root directory of your boot disk). Now add the new font names to the existing lists of fonts – one for the screen and one for the printer.

3) Finally, save your text file and reboot – Timeworks should pick up and load the new fonts. It's easy to mess up an ASSIGN.SYS file, so be sure to enable back-ups in your text editor, or make a copy before you start.



Can I Cix it?

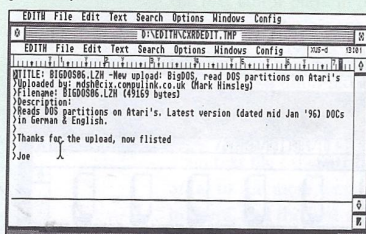
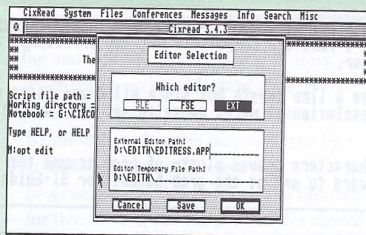
If you use the Cix conferencing system, you really need a good text editor. Follow the steps to improve the quality of your on-line life...



1) First, install your text editor and open a window for it on the desktop. Now, make a note of the "path" in the window and also the exact filename

of your editor (in this case, the path is "D:\EDIT\").

2) Move to the "editor" dialogue box ("system" menu) and click the "EXT" button. Now type in the path of your text editor, plus the filename into the top box, and just the path into the bottom.



3) Now, every time you "say" or "comment" the text editor will be summoned.

Equally, when you "reply" to a mail message you will be presented with the original to chop about as necessary. Easy life!

Extended characters

The ST can display plenty more characters than those defined by the ASCII standard. We're talking about the é, à, ¥ and Δ of this world. Any text editor worth its salt will allow you to use these characters, often picking them from a neat little table, but you do have to remember that only the ASCII character set are guaranteed to appear correctly on other computers.

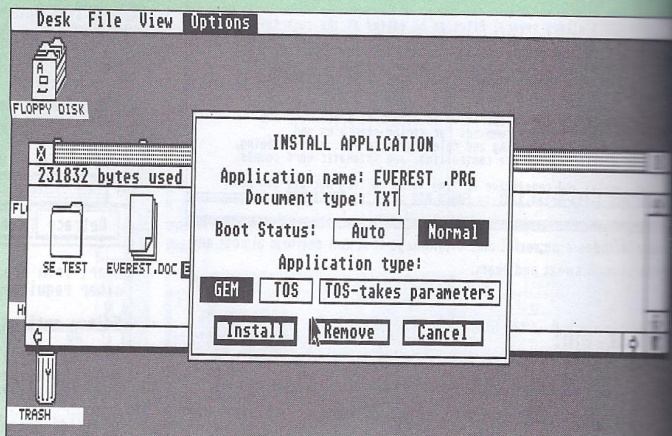
Therefore it's wise to only use them if the information you are working with is relevant purely to Atari owners (for example, a how to upgrade your memory guide) then it's safe to use the extended character set. If the document you are preparing is of a more general nature ("walrus polishing – a DIY guide") it's safer to stick with the default ASCII characters.



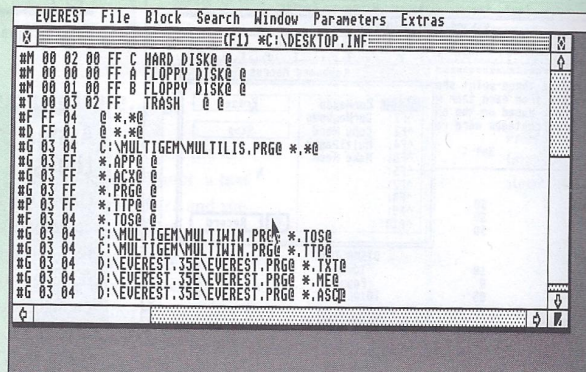
Extended character can be inserted with ease given a good text editor – be careful if the file is PC-bound though!

Automatic for the people...

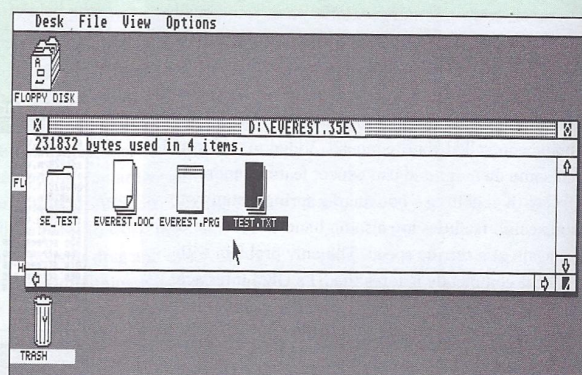
How would you like it if your editor automatically loaded and displayed any text you clicked on? Easy when you know how sunshine – just follow the steps...



1) Start by opening a folder for your text editor and clicking once on its icon. Choose "install application" from the drop down menu and enter "TXT" into the "document type" section. Click install and save the desktop. As you've probably gathered, this makes sure that the text editor starts when you double click on a ".TXT" but we want to add a couple of extra extensions, so...



2) Run your text editor and load the DESKTOP.INF file. Scroll down until you find the entry pointing to your text editor. Next, "copy" the line and paste it twice, as shown above. Change the extensions on the two copies to ".ME" and ".ASC".



3) Finally, reboot your machine. Now, whenever you click on a file with an ".ASC," ".TXT" or ".ME" (for example "READ.ME") extension your text editor will be launched. You can add extra extensions by tweaking the DESKTOP.INF file further. Cool, huh?

What is ASCII?

ASCII stands for the "American Standard Code for Information Interchange". Basically, it defines 128 standard characters and allows you to write a text file on your ST that (taking into account differences in disk formats) can be viewed and edited on any other computer, be it a PC, a Macintosh or a Unix workstation. Ironically, the means to start a new line was not defined by the code and varies from platform to platform. However, most text editors take this in their stride.

IMAGE



POSITIVE

24 Bit Image Processing for any Atari...

- ◆ Supports all ST, TT and Falcon screen resolutions.
- ◆ Allows the editing of 24-bit True Colour graphics on an ordinary ST!
- ◆ Compatible with GDOS, SpeedoGDOS, NVDI 3, GEM compliant graphics cards, ScreenBlaster, BlowUp030, virtual memory drivers, TT Fast RAM, Multi-TOS, Geneva, MagiC, MagiC Mac and Gemulator.
- ◆ Powerful block handling includes the choice of 11 different overlay methods with variable transparency.
- ◆ Supports the creation of 3D 'random dot' stereograms and foreground 'enhanced' stereograms.
- ◆ Uses the Falcon's DSP for processor intensive tasks and JPEG decoding.
- ◆ Outputs to most popular models of colour and monochrome dot matrix, inkjet and laser printers.
- ◆ Images can be rotated to any angle in clockwise and anti-clockwise directions, to an accuracy of one degree.

- ◆ Images can be rescaled up to more than 400% of original size without noticeable loss of quality.
- ◆ Images can be printed to disk if memory is low, then printed directly from the GEM Desktop.
- ◆ Numerous useful image processing filters are included, along with the ability to create your own.
- ◆ Supports 256 level (8-bit) masking. Includes a configurable gradient tool to aid mask creation.
- ◆ Allows processing of user defined areas (both regular and irregular) without affecting other parts of the image.
- ◆ Includes a number of localised retouching tools with full user configurability.

Positive Image requires at least 1 Mb of memory. A hard drive is recommended, though not essential. For a limited period, we are offering the package at an introductory price of just £65 (normal price £79) plus postage and packing (UK - £2.00, Europe - £5.00, rest of world £10.00). Payment in UK currency only - credit card or banker's draft preferred. Overseas customers, check first to see if we have a distributor in your country. A usable demo version is available from Floppyshop for just £1.00.

Floppyshop

PO Box 273,
Aberdeen AB9 8SJ

Credit Card Line Tel/Fax 01224 312756, Technical Helpline Tel/Fax 01224 586208



System Solutions

Company of the Year 1994

A page full of new products and more to come in 1996

MagiC 4

"If you want a multitasking system that works simply and reliably, then MagiC is for you."
ST Review, June 1994.

MagiC 4 is a complete TOS replacement (No more TOS upgrades required!). Fully pre-emptive with very fast disk filing, faster MIDI and faster printing routines it is actually accelerating your programs. MagiC 4 comes with truly exciting new features and a completely revamped MagiC Desk.

Some of the new features are ...

- ★ Now runs on the Falcon 030
- ★ Drag & Drop (pipes)
- ★ IDE hard disk & DSP support
- ★ Additional file systems and device drivers can be loaded
- ★ Accelerated and completely re-entrant filing system with background DMA (requires HD-Driver 4.5) i.e. you can now format or copy a floppy whilst using other programs.
- ★ Writeback Daemon
- ★ Built-in routines for 3D-Look and Colour Icons
- ★ New file selector
- ★ Symbolic Links (Aliases for files)

New MagiC Desk features:

- ★ New powerful 3D look Desktop with low memory requirement,
- ★ Copy and format in the background without locking of running programs or the desktop.
- ★ Kobold support
- ★ Parallel searching with comprehensive filters
- ★ 100 colour icons
- ★ Auto locator in the Desktop and file selector
- ★ Powerful font selector for text display
- ★ Background tiling and much more....

MagiC 4 for ST/TT/Falcon £69.95
MagiC 4 and Kobold £99.95

Please call for upgrade prices.

NVDI 4

Incorporating the screen accelerator, GDOS, Speedo and TrueType font systems of the previous release, the new version NVDI 4 comes packed with lots of useful new features. Here is a short list:

- ★ Faster print routines for the parallel port
- ★ Powerful new font tool for installed and un-installed fonts to pre-view, test print, group fonts into families and to print a font listing
- ★ Print test page sizes and max. printable area
- ★ UNICODE: Pro font support (65000 unique characters per font)
- ★ Support of Windows 95 fonts
- ★ Comes with 8 new fonts not previously supplied
- ★ More Colour printer drivers, Font quality test, NOVA-VDI support and more

NVDI 4 including 8 Speedo fonts £59.95
NVDI Postscript type 1 Font Module £24.95
100 TrueType font Pack 1 £39.95
100 TrueType font Pack 2 £39.95
500 TrueType font CD-ROM £49.95

Please call for NVDI special versions, upgrade options and prices.

NVDI 2.5 is still available for only £29.95

EASE 4

How to improve your ST desktop? Take Ease 4 features (right click to double click, auto window sizing to fit contents, text and icon windows, superb colour icon editor, auto sizing RAM disk, CORRECT file checking and repair program); add new features such as the Memo Icon - to leave those important reminders on your desktop; a new File Tree Pop-Up to get through deeply nested directories fast and without opening countless windows, and more features (too many to list). Add a revised manual and you get Ease 4. Definitely a vast improvement over the original desktop.

Ease 4 - desktop replacement software £49.95
or bundle it with MagiC 4 for only £99.95
or bundle it with NVDI 4 for only £89.95

CD ROMs



Our CD ROM Systems are special

- ★ Multi-session Drive ★ Photo CD compatible
- ★ Quad Speed ★ No caddies ★ Plays Music CD
- ★ Dual SCSI port ★ Headphone socket with Volume control ★ Stereo Phono connectors

New ExtenDOS Pro 2.2

The Toshiba 4X speed drive comes complete with ExtenDOS Pro 2.2. New features include:

- ★ Direct SCSI transfer of Audio Tracks - drag samples from music CD's without sampling
- ★ Advanced Audio CD Player with Record track to hard disk feature
- ★ Comprehensive user friendly install program

FREE Mega Archive CD with every drive

4X Speed CD ROM system inc. ExtenDOS Pro for the Falcon with SCSI II Cable, or TT £269.95
for the ST(FM/e) with the ICD Link II £319.95

ExtenDOS Pro 2.2 software only £39.95

SCSI Drives



Best Hard Drive 1994
ST Review Xmas '94
MiniS hard drives are full SCSI systems, hardware compatible with all Atari, Amiga, Mac and PC computers. They are unrivalled in size, low noise, speed and style. The ST(FM/e) version now comes with the ICD Link II as standard, or choose the Translator with HD Driver. Also included are terminators and all required cables.

We will match prices but won't compromise quality
Gold Award of 93% - ST Format Feb. '94

Essential Buy of 92% - ST Review Christmas '93

- ★ Quiet fan ★ Internal Power Supply 100-240V
- ★ 2 Year Warranty ★ Small (2.5x6x8.5") (WxHxD)
- ★ Dual SCSI Port ★ Device Number Switch

		TT/Falcon	ST(FM/e)
80Mb	IBM	£139.00	£189.00
127Mb	Quantum	£199.00	£249.00
270Mb	Quantum	£219.00	£269.00
540Mb	Quantum	£279.00	£329.00
850Mb	Quantum	£309.00	£359.00
1Gb	Connor	£349.00	£399.00
2Gb	Connor	£759.00	VAT Included!

SyQuest EZ Drives

The new Syquest EZ 135 drive is available now. Use it as your first drive or as a fast backup system. Peace-of-mind two year warranty on the drive and five years on the cartridges.

EZ135 Inc one cartridge £219.00
Extra cartridge £17.95
Three cartridge pack £49.00
Five cartridge pack £79.00

HD Driver 4.5

The fastest Hard Disk Driver software just got better. Now you can write-protect individual boot/root sectors, change the boot sequence if you have more than 1 drive, and most importantly can multitask Hard Disk access under MagiC 4. On the Falcon partition sizes of 1Gb are supported.

HD Driver 4.5 £29.95

MAIL ORDER,
Fax: (01753) 830344
Windsor Business Centre, Vansittart Rd, Windsor. SL4 1SE

(01753) 832212

SHOWROOM,
Fax: (0181) 693-6936
17-19 Blackwater Street, East Dulwich, London. SE22 8RS

(0181) 693-3355

Prices include VAT and may change without notice - UK P&P £3.95 - Multiple or large items, add £10 courier. E&OE

With two service centres and Atari trained engineers at your service, the Atari Workshop is now Atari UK's preferred and recommended service agent. Need it back in a hurry? Ask for our next day ProService. Call us for estimates and to discuss your upgrade requirements. We fit all quality upgrade products. Ask for our Courier collection and delivery.

Call Windsor on (01753) 818816, or London on (0181) 693-1919.

ATARI

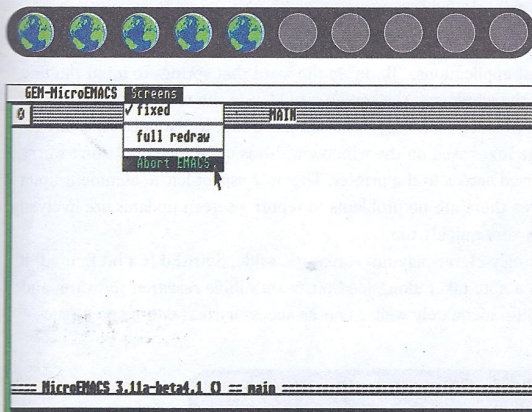
WORKSHOP

On the edit!

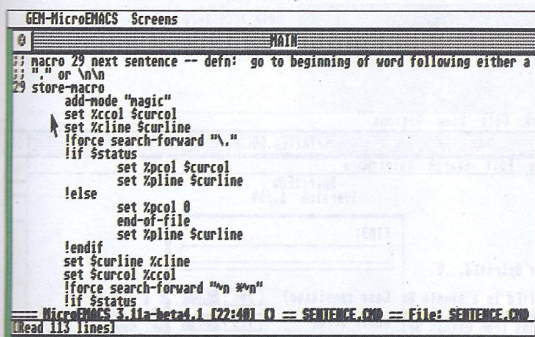
Wow – it's a crazy fun-packed world out there in editor land guys and gals!
Join Nial Grimes as he shows you what's what in textual excellence...

GEM MicroEmacs

MicroEmacs has its roots in the mystic world of Unix workstations and is as user-friendly as your average tax return form. Fans swear by it; everybody else just swears at it, especially when you discover that the usage of "GEM" in the title merely means that the text appears in a window – there's not a useful menu in sight! To be fair though, MicroEmacs has never been about ease of use. Every single function is written as a macro in a powerful scripting language and it can therefore be expanded to suit the application. The documentation reflects this "no prisoners" approach, but some macros are supplied, so you can get an idea of how things work. However powerful MicroEmacs may be though, it's strictly for techies, even in its (marginally)



Wow – a GEM interface! But what happened to the menus?



Extra features can be added by writing your own commands – novices need not apply!

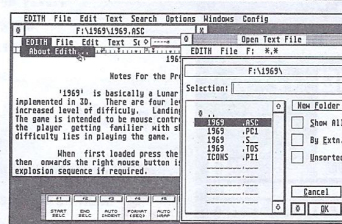
more friendly GEM guise.

Edith Professional

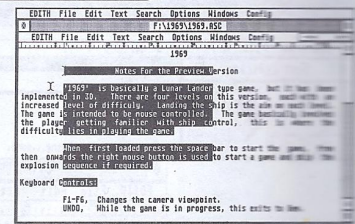
If you are looking for slick sophistication in a text editor, stop right here. Edith Professional is a true disciple of the ST's GEM interface, with menu-laden widows exuding from every pore – heck, even the file selector is in a window that you can shuffle around in between documents. And the feature list is rather neat

too – alongside a macro recorder you'll find support for irregular blocks (see the screen shot) and some really trendy formatting features. You can also cut and paste blocks by highlighting them and dragging with the mouse. Almost every feature is backed up by a keyboard shortcut and a help system is always available to explain any functions that you don't understand. You can even run the whole shebang as a desk accessory.

The penalty you pay for such a sophisticated application is speed, or rather lack of it – Edith isn't pedestrian by any means, but there are quicker options if you are using a vanilla ST. Give the demo version a try and see what you think.



Edith Professional is powerful and beautiful.

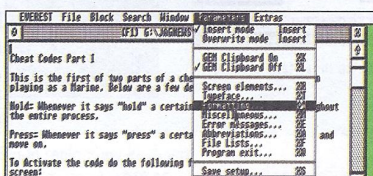


Square blocks of text can be lifted and pasted elsewhere in a document; ideal for grabbing columns.

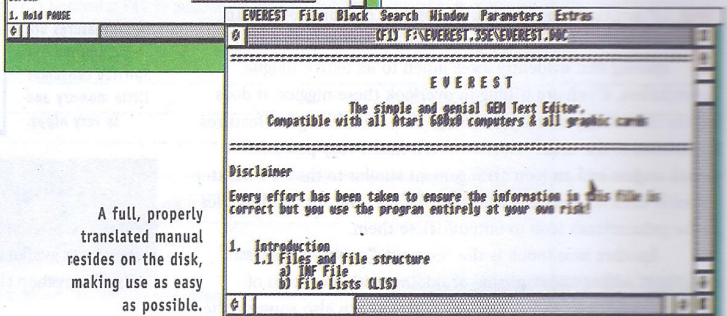
Everest

Having just been mollycoddled by Edith Professional, Everest's stark lines can come as a bit of a shock, but buried beneath that innocent looking window is a very sturdy text editor. You can open up to ten documents, memory permitting, and move around each at lightening speed – searching is particularly nippy.

And yet despite this speed, Everest does make quite a few concessions to elegance: monospaced (in other words, the characters all take up the same space) GDOS fonts are supported and you can also specify different formatting characteristics for different file extensions, which is very handy. The way the "cut" and "copy" commands automatically grab the current line if a block isn't selected is also rather nice. In fact, Everest is probably the best option if you own a standard ST – it provides all of the features a good text editor should and delivers them all at a terrific speed, and you can't ask much more than that. It's also supported in the UK by InterActive, so registration shouldn't be a problem.



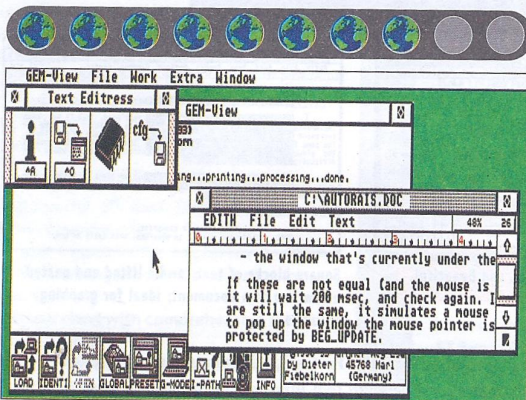
A somewhat stark interface hides a powerful and fast text editor.



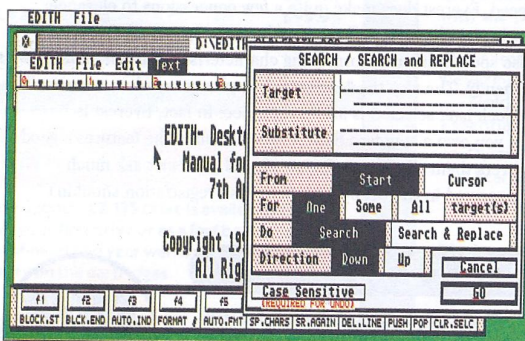
Edith

Following the release of Professional, the original version of Edith was relaunched as freeware, making it ideal if you only need an editor occasionally. Many of the features that make Edith Professional such a joy to use are in place – the realtime scrolling (text moving up and down as you move the window bars) and the window-based menus. Although not as powerful as its elder sister, this application does pack a solid range of features, including standard block editing (copying and pasting) and support for the extended characters.

One coup for little Edith is the search facility, which can highlight all occurrences of a certain word in the text; and that's in addition to the usual replacements and direction options. All of the main features are listed on a First Word Plus-style panel at the bottom of the screen – just click on a button. Thanks to the “few-frills” approach, Edith runs in an admirably small amount of memory and yet is powerful enough to handle most jobs. It's free – what have you got to lose?



Edith can be levered into an accessory slot and used within most applications.



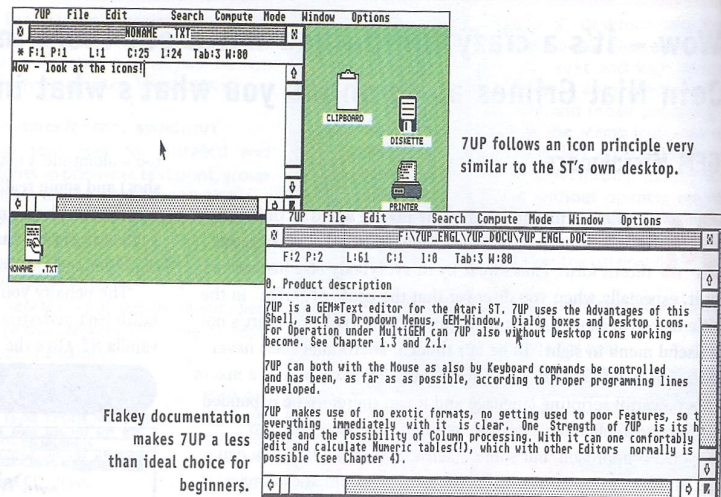
Although less powerful than Professional, Edith is up to most text editing jobs.

7UP

7UP is a German program that arrives on our shores with loosely translated documentation and variable menu spacing that evidently owes much to its native tongue. Nevertheless, if you are willing to overlook these niggles, it does deliver blistering performance alongside a sound range of features. In addition to the usual selection you'll find a very powerful search engine and an icon arrangement similar to the ST's desktop – double click on the disk icon to load a file, and simply drag files to the printer/trash icon to output/delete them.

Another nice touch is the “compute” menu which is capable of adding up, averaging or fiddling with a column of highlighted figures. With a little fiddling you can also squeeze the

current date, time, filename and page number onto printouts – losing your place in a gargantuan public domain document becomes a thing of the past. And yet despite its competence, the high price combined with the somewhat flakey documentation makes Everest the more attractive option.



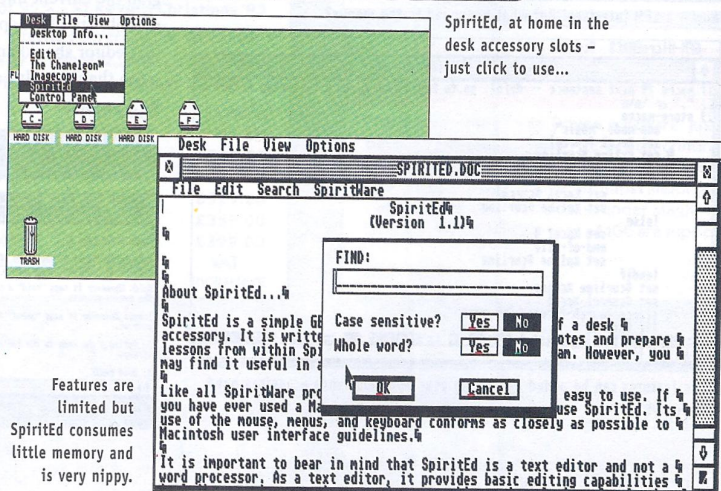
7UP follows an icon principle very similar to the ST's own desktop.

Flakey documentation makes 7UP a less than ideal choice for beginners.

SpiritEd

SpiritEd is a desk accessory text editor, that sits in the leftmost menu and can be used alongside most applications. “Basic” is the word that springs to mind the first time you summon the window to the screen – hidden in the menus you will find search facilities and simple block handling, but that's just about it. I suppose the way it automatically formats the text based on the window width is quite nice, and don't worry, narrow sizes are not carried across to the printer. The only aspect left to comment upon is the speed, and in this area there are no problems to report – screen updates are lively and searching returns results very quickly too.

However, staggeringly-clever-play-on-words-title aside, SpiritEd is a bit limited. It was designed to serve as a note taker alongside Spiritware's Bible research software, and that's a role it probably fills adequately well; as far as accessory text editors go it pales alongside Edith.



SpiritEd, at home in the desk accessory slots – just click to use...

Features are limited but SpiritEd consumes little memory and is very nippy.

Where to go...

All of the programs covered on these pages, or demos thereof, should be available through the usual public domain channels: Try Floppyshop (01224 312756) or Goodman (01782 335650).

KEYS TO SUCCESS!

TT KEYBOARDS



TT not included

There are many and varied reasons for replacing your original ST keyboard with a TT one. It might be to remove your ST from your desk, maybe that you are re-housing your ST in a Desktopper and want a better solution than Freekeys, perhaps you have run out of space inside your ST and can't get the keyboard in properly, may be your old keyboard has broken, or maybe

Phone for a
on 01487 773582 (24 hours)

To order by credit card,
Delta or Switch call

(24 hours)

E&OE

With the standard ST keyboard the mouse port self distrusts, the Function keys are difficult to hit and the feedback when you hit a key is 'mushy'. The TT keyboard solves all these problems and comes complete with adjustable feet.

WHILE STOCKS LAST

COMPO
SOFTWARE
For all your Atari computing needs

Yes I'm going to replace my keyboard.

Please rush me a TT Keyboard at £49.99 including VAT and Postage

I wish to pay by ☐ Cheque ☐ Credit Card ☐ Switch

Name _____

Address _____

_____ Postcode _____

Card number

Valid from ____/____/____ Expiry date ____/____/____ If Switch Issue Number _____

☐ Tick here if you also want a free copy of our latest catalogue

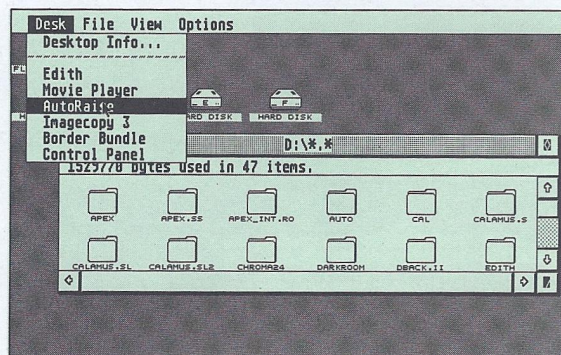
    

Now send this order form to:

COMPO Software, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambs PE17 2PF.

Can I *boot* it?

They're cool, they're trendy, they kick butt when it comes to taming your desk accessories. Nial Grimes investigates the boot manager phenomenon. Can this man get excited about software or what?



Why waste memory on pointless accessories? With a boot manager installed, you won't have to!

After you've been working with your ST for a while you'll notice that your boot disk becomes increasingly crowded, the AUTO folder rapidly filling with patches and system enhancements, with desk accessories struggling for space in the ST's six available slots. Often you'll find yourself using particular accessories with certain programs – for instance, a calculator is handy if you are word processing, but you don't really need one alongside a spreadsheet. Rapidly you find yourself forced to waste memory on utilities that you don't really need or use different boot disks for each application. And that latter option is redundant if you own a hard disk, for obvious reasons.

Wouldn't it be wonderful if your ST asked you what you wanted to load at boot-up, allowing you to pick a range of desk accessories and AUTO programs, depending on the application you are about to use? Well, my friends, you are in luck, because that's exactly what a boot manager is designed to do...

Boot up...

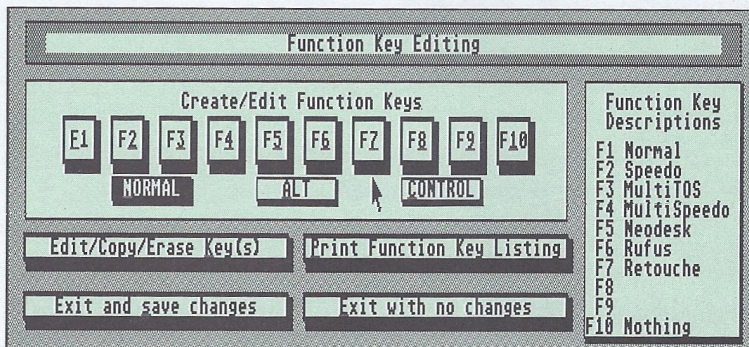
This feat is far from mystical – boot managers actually work on a very straightforward principle. They sit at the very beginning of your AUTO folder, and load before any other program. At this point they display a menu and allow you to choose what you want to load, changing the name files that you switch off. Once you exit the manager, the ST sets about

finishing the boot-up sequence and happily ignores the renamed files; it's that simple. The same trick is used with desk accessories.

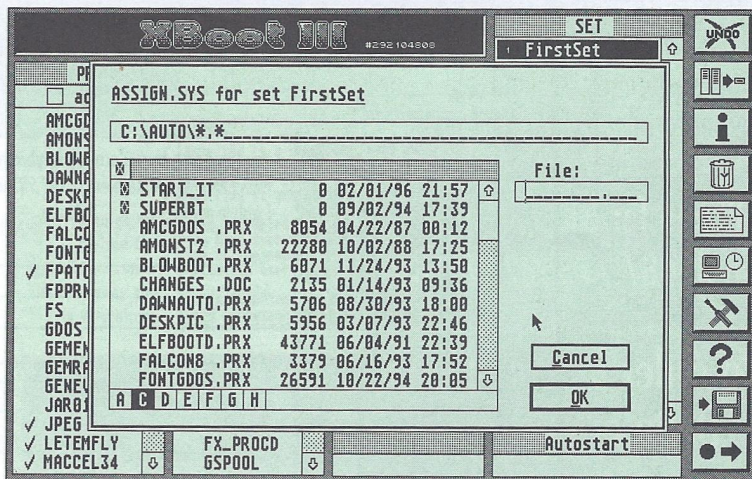
And dealing with the AUTO folder and desk accessories is just a small taste of what a boot manager can do for your system. All sorts of other settings can be controlled in a similar way – take GDOS with its ASSIGN.SYS file. Any boot manager worth its salt will allow you to keep a copy of the .SYS file used by each application; just fiddle with the boot menu and GDOS will find the right file in place when it needs it. DESKTOP.INF files are another speciality. The chief advantage here is being able to choose which resolution the ST is in when it hits the

desktop. If you are lucky enough to be using a machine with TOS 2 or above you can also specify which icons appear on the desktop.

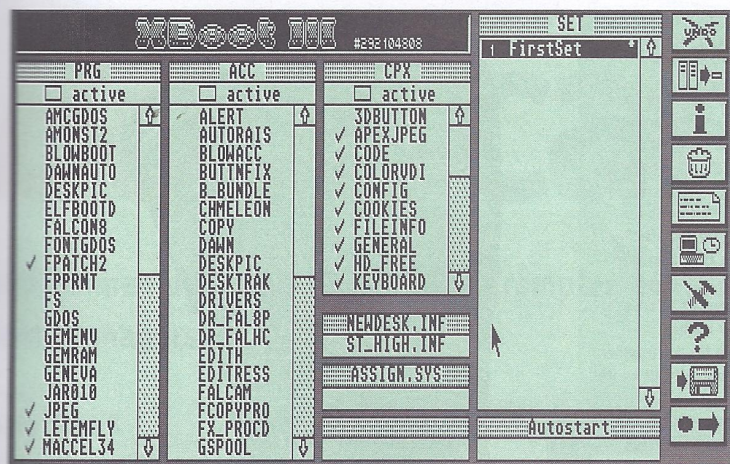
Given the huge amount of space available on most hard disks these days and the number of scrummy public domain utilities and accessories available, even selecting the ones you want to use can take some time – life's too short for configuration! With this very problem in mind, most boot managers allow you to create "presets" or collections of programs linked to a keypress or a button click. A little time spent setting up some presets can save hours over a year; it also ensures that each of your applications has the maximum amount of memory available.



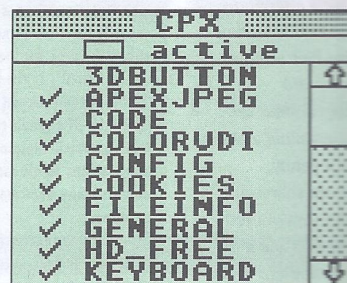
Presets allow you to take a whole configuration to a single key or button.



Multiple GDOS applications can be easily fed the correct ASSIGN.SYS file with a boot manager.



With creative use of DESKTOP.INF files you can choose which resolution to boot in.



Short-handled CPX files in addition to the more usual accessories and programs.

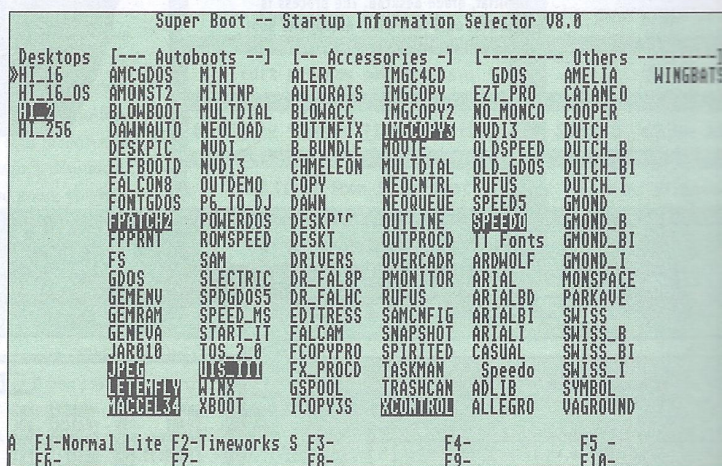
Let's get serious!

Many boot managers stretch beyond these basics, allowing you to use extra file types. For instance, XBoot can enable and disable the CPX files cherished by XControl. Super Boot goes one stage further again, in letting add your own types. This takes a little bit of effort, but it means that you can set up almost every aspect of your system from the boot manager screen. Imagine you've got a ramdisk that uses a configuration file; you could quite easily ask Super Boot to copy the right capacity across, depending on what you are about to do.

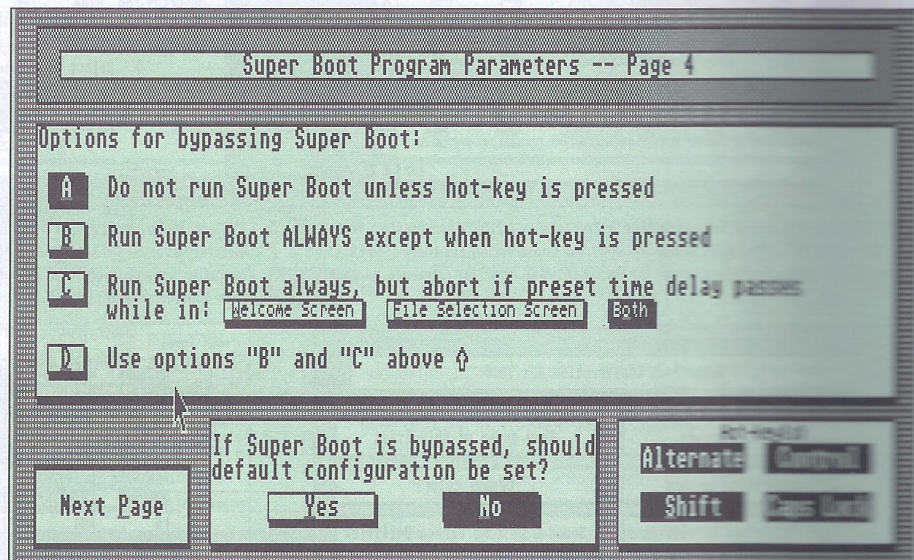
There's a healthy spirit of competition between the authors of the various boot manager programs and as a result you'll find lots of unessential extras bolted on to each program. For instance, Super Boot and Start-It are capable of showing a picture or playing a snatch of sampled sound. On a more practical note some programs allow you to password protect your system – obviously, the scheme isn't that secure because boot managers can be by-passed, but it will deter most casual snoopers.

The more astute among you will have realised that a boot manager is not really saving time if the current configuration is correct. With this in mind, you can usually define a "hot key" that summons the manager – for instance, you could ask Super Boot to appear only when the <Control> key is held down. Alternatively, just set a time limit; in this way, you can still wander off to get a biscuit without fear of returning to find a patiently waiting boot manager. Of course not all managers support all of these features – it's a case of reading the reviews and picking the one that fits the bill.

Mind you, all of the boot managers we've covered are very well specified and



Super Boot relies on a keyboard-controlled interface and a separate configuration utility, but it's a damned good utility all the same.



Relatively, get the boot manager – it's a simple as that.

the main consideration is likely to be the interface. For the reasons explained in the "booting" box, boot managers cannot take advantage of the ST's GEM interface and therefore vary quite a lot in terms of appearance – XBoot tries hard to look like a regular application, whereas Super Boot favours a keyboard approach. A more

important difference becomes apparent when you get around to configuring the program – Super Boot uses an external program. This may not be a serious problem – you have to ask yourself how often you want or need to change the presets.

Better by far...

A boot manager is a worthwhile investment if you are using a floppy disk system, but it rapidly becomes essential as you move onto a hard drive – a program such as XBoot can literally save fifteen or twenty minutes of shuffling files around. Fringe benefits such as password protection enhance the appeal. And the best news is yet to come: installing a boot manager needn't cost you a penny, because the vast majority are shareware. Once you've discovered the joys of total system control, a ten or twenty dollar registration fee is easy to stump up. Trust me on this one...

What's all this booting stuff then?

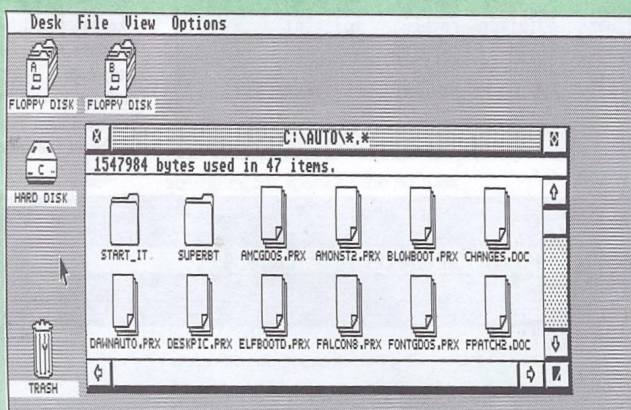
When you put a disk in your ST's disk drive and switch the machine on, a standard series of events takes place – this is called the boot sequence. Forgetting about a few of the less important stages in this process for a second, the first thing the ST does is to check the disk for the presence of a folder called "AUTO". It then runs files ending in ".PRG" – the program files. At this point, GEM (the ST's graphical interface) hasn't loaded, which explains why normal applications won't run from the AUTO folder and also why boot managers can't call on its services.

AUTO programs safely out of the way, the ST looks for desk accessories in the root (top) directory of your boot drive. Finally, a DESKTOP.INF is sought and the resolution adjusted before you are hurled onto the familiar, green desktop. The process is identical on a hard disk, except the boot drive will usually be C.

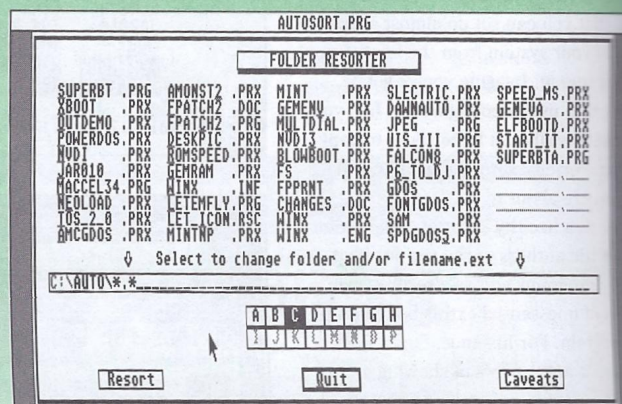


Show me!

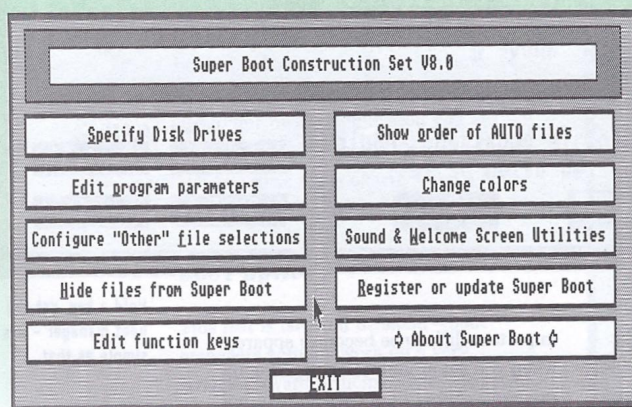
Installing a boot manager is a piece of cake. We'll use Super Boot in this example, but the principles are the same, whatever program you decide to use.



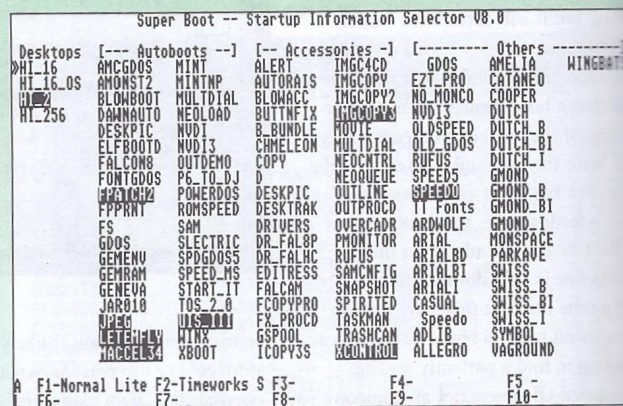
1) First, copy SUPERBT.PRG and SUPERBTA.PRG to your AUTO folder. Create a folder called SUPERBT in the AUTO folder and copy the Construction Set there (SUPER_CS files). It's also a good idea to put the documentation here, for reference purposes.



2) Next, fire up Autosort and reorder the files so that SUPERBT sits first in the directory and SUPERBTA last. If you haven't got Autosort, you'll have to do this manually, copying everything out of the AUTO folder, putting Super Boot in and then copying everything back.



3) Configuration time! Rummage around until you find the Super Boot Construction Set and run it. You'll need to visit three places here – "edit program parameters" will guide you through basic set up and "edit function keys" will allow you to conjure up some presets. Finally, rename and copy your DESKTOP.INF file to the SUPERBT directory.



4) Ready to roll at last! Now just reboot your machine and if all has gone according to plan you will be presented with the Super Boot screen. You can move the selection pointer with the cursor keys and files can be enabled/disabled with the space bar. Presets are listed at the foot of the screen – warp factor nine Mr. Sulu!

Boot camp...

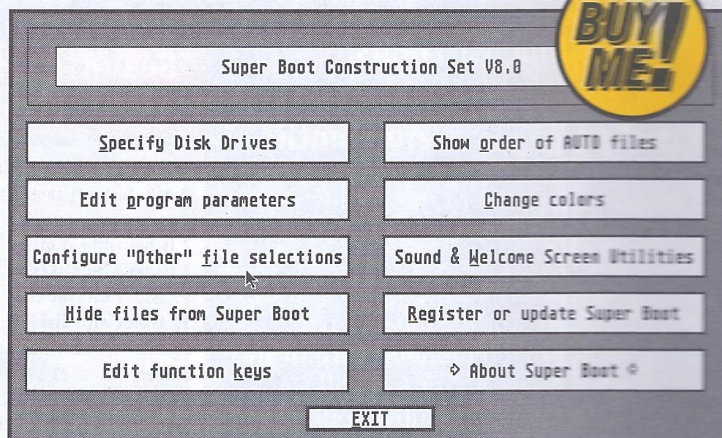
Nial Grimes dons the "Docs" and tramples his way through the time-saving world of boot managers...

Super Boot 8

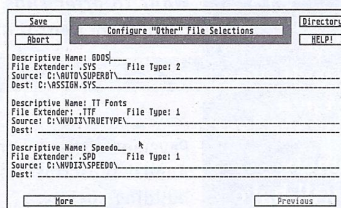
If you can't quite afford a copy of XBoot, Super Boot is the kiddie to go for. It may lack its commercial counterpart's sleek looks, but functionally it's right up there with the best. The main difference as far as general usage is concerned is the interface – it's a text-only affair. However, movement around a mass of desk accessories and ".SYS" files is easily accomplished via the cursor keys.

Running along the bottom of the screen you'll find the presets, capable of holding complete configurations – just prod a function key to do the business. Dig a little deeper and you find facilities to display Degas or NeoChrome pictures and replay sampled sounds: 2001 sound effects, here I come! Practicality is also good; you can go as far as simple password protection and also adjust the seek rate of the floppy drives. There is one small problem that can crop up, in that the function keys are only capable of holding so many files – push too hard and you'll run out of slots. However, this is unlikely to affect most people.

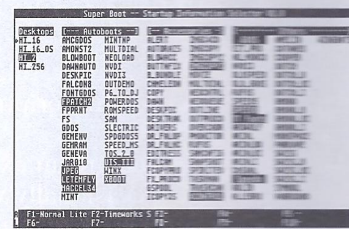
Configuring Super Boot is accomplished via a separate GEM-based application. Basic use is very straightforward and you can add extra file types given just a little effort; there's a mountain of documentation to guide you through any problems you might encounter. Yes, Super Boot is a real gem, and with a suggested registration fee of \$15, it won't break the bank. Various incarnations have been running on my ST and Falcon for several years without any problems whatsoever. Recommended.



The Super Boot Construction set allows you to configure the program, tying pictures and sampled sounds if you wish.



Extra extensions can be programmed if you know what you are doing.

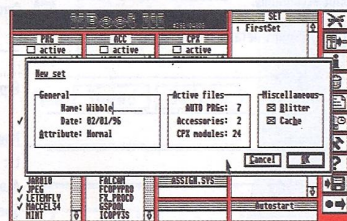
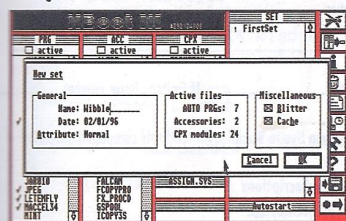
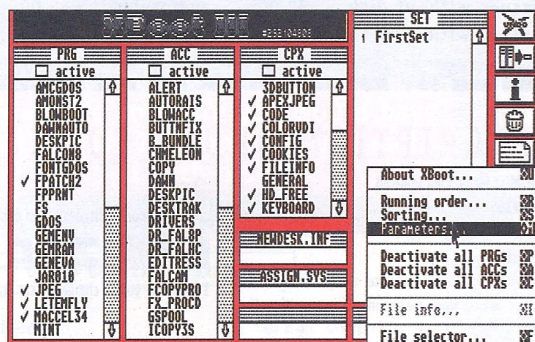


Regularly used configurations can be tagged onto a function key and executed instantly.



XBoot feels like a regular GEM application and is therefore very easy to use.

To create a new "set" just click on the programs/accessories you want to load and hit the right button.



Installation is handled by a custom program – just click and go!



XBoot 3

XBoot is probably the most intuitive boot manager on the market and that's largely thanks to an excellent, mouse controlled interface. Right from the very start you are given VIP treatment. You only need to run the installation program to set everything up, and it's even kind enough to fiddle XBoot into the start of your AUTO folder; no need to reach for Autosort here. Actions that see Super Boot users reaching for the separate "construction set" utility can usually be carried out from within XBoot itself – the obvious example is creating new sets. Here you simply need to click on the programs you want to run/accessories you want to load and name the set.

Acquainting yourself to the ways of XBoot literally takes seconds, because it feels very much like a GEM application, with the files laid out neatly in windows and icons running down the right of the screen; the utilities menu even produces a pop-up menu. When you are ready to head for the desktop, just hit the right button and all the shuffling is taken care of. In terms of raw power, it sits slightly lower down the scale than Super Boot – for instance, you can't set up custom file types – but it does contain enough features to keep most users happy, and it is the classiest option (as you'd expect, considering the price). Put it this way – if you've got a hard disk, XBoot is well worth the money...



ATARI World

The essential guide for all Atari computer users

The World's biggest English Language Atari Magazine - 100 packed pages every month.

Yes I want to subscribe to the worlds biggest Atari magazine - Atari World - how do I do it?

Where ever you are in the world you can subscribe to Atari World...You can pay quarterly, either by credit/debit card or by standing order. Each quarter we will automatically renew your subscription. Alternatively you can make an annual subscription by cheque or credit/debit card - and get 13 issues for the price of 12. The readers disk - you choose. Either buy it when something is interesting to you or get it along with your subscription each month.

As a subscriber you are an extremely valued customer. Occasionally we will have a bonus for subscribers like issue 8 - when you will automatically get the HiSoft Basic 2 compiler, whether or not you normally get the standard reader disks.

Scandinavian customers get an additional Swedish supplement free with each issue

Readers of Atari World in Sweden, Denmark and Norway can subscribe via Sven Bornemark Musik. Payment should be made in Swedish, Norwegian or Danish Kronner via Post Giro.

	Sweden	Norway	Denmark	
3 issues without disk	SEK140	NKK120	DKK110	
3 issues with disk(s)	SEK190	NKK160	DKK140	
13 issues without disk	SEK560	NKK480	DKK440	
13 issues with disk(s)	SEK760	NKK640	DKK560	

Scandinavian subscribers should pay the correct amount by Post Giro to the following account:

Sweden 23 59 59-4. Norway 0806 1903977
Denmark 015-3087 Finland 800053-1092211

Sven Bornemark Musik, Lergosv 79, 238 40 OXIE. Tel: 040 54 54 54.

Fax: 040 611 17 69. Email: sven@dada_ct.se or 2:200/136.56

FidoNet.

Want to offer subs in your country? Talk to our publisher, Neal O'nions on 01487 773543.

SVEN BORNEMARK MUSIK

So what does it cost?

Payment either by credit card or standing order (UK quarterly subs only). Annual subscriptions can also be paid for by a cheque drawn on a UK bank or building society.

	UK	Scandinavia	EU	Rest of World
3 issues without disk	£9.50	See	£11.50	£14.50
3 issues with disk(s)	£14.00	Special	£16.00	£19.00
13 issues without disk	£38.00	Scandinavian	£46.00	£58.00
13 issues with disk(s)	£56.00	Prices Above	£64.00	£76.00

ATARI WORLD SUBSCRIPTION ORDER FORM

Yes I'm going to do it - I'm going to subscribe.

My name is:

Please send Atari World to me every month at the following address:

Telephone:

I want to subscribe ☐ Quarterly ☐ Annually

Reader Disk? ☐ Yes ☐ No

Either
Complete the following standing order mandate
(option for UK subscribers only):

Please pay:

National Westminster Bank,
Huntingdon Branch
Sort Code 60-11-30

to the account of Specialist Magazines Limited

Account number 99651335

the amount of £9.50 (nine pounds 50p)/£14.00 (fourteen pounds)* including postage and packing.

Please make the first payment now and thereafter every three months, until you receive further notice from me/us in writing quoting the reference Atari World and debit my/our account accordingly.

My Bank/Building Society account details are:

Bank Name

Account Name

Account Number

Sort Code

Branch Address

Signature(s)

Date

Or

complete your credit/debit card details here:



I authorise you to charge my credit/debit card for my subscription.

Card number

Expiry date _____ If Switch, Issue number _____

Now unless you live in Scandinavia send this completed form to:

Atari World Subscriptions
Specialist Magazines Ltd
Unit 3 Green Farm
Abbots Ripton
Huntingdon
Cambs PE17 2PF

You don't like filling in forms? Well if you want to subscribe by credit/debit card then just call our credit card hotline on 01487 773 543 (9.30 to 19.00, Mon-Fri).

SUBSCRIBE To

Subscribe NOW and keep getting your Atari World

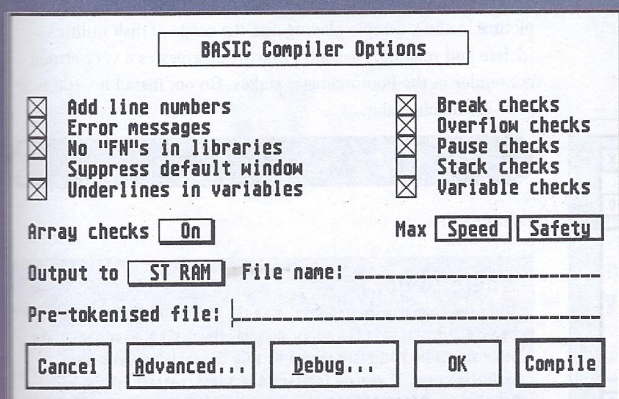
Much has been talked about the benefits of subscribing to Atari World. There are the obvious benefits that you get when you subscribe.

- Atari World delivered to your door each month
- You can optionally get the reader disk when the magazine comes out.
- It is cheaper than buying the magazine each month. UK Subscribers save nearly £10 per year without disk and a minimum of over £20 when subscribing with disk.

However there are other hidden benefits. When you subscribe we get more of your money than if you buy a copy on the newsstand. That's more money to keep up the editorial standards and keep Atari World at 100 pages per issue. So if you reserve your copy at a small local newsagent stop! It does not encourage that newsagent to stock Atari World and you would do us all a big favour by subscribing.

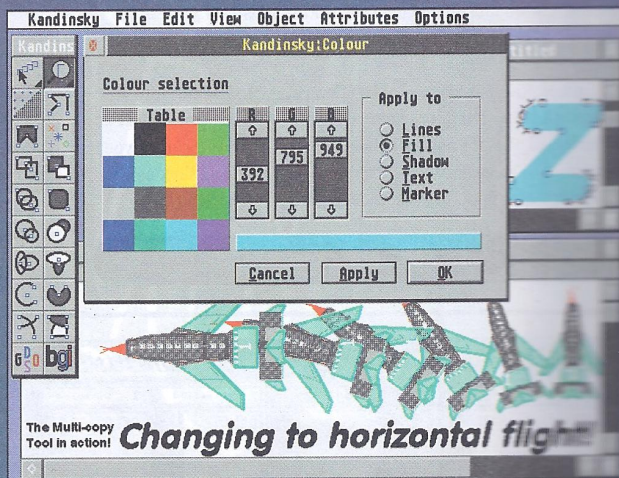
So please subscribe now; and help us to keep bringing you the best Atari World possible.

Look at some of the software you would have received in the past 12 months if you had subscribed with disk:

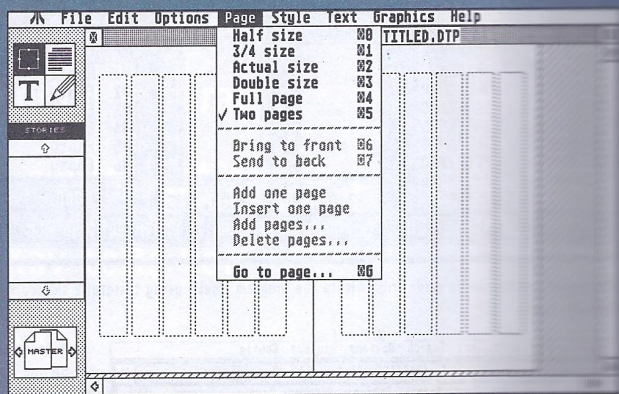


All our subscribers receive a free copy of HiSoft Basic 2

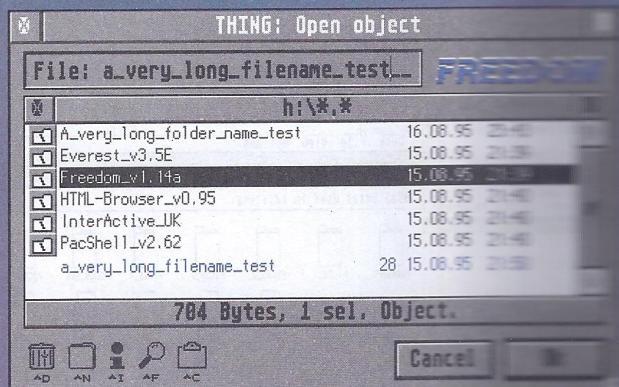
ATARI World



Get drawing with Kandinsky V2.02 - the latest version of one of the best drawing programs of all time.



Timeworks 2 - the full commercial release of this top DTP program



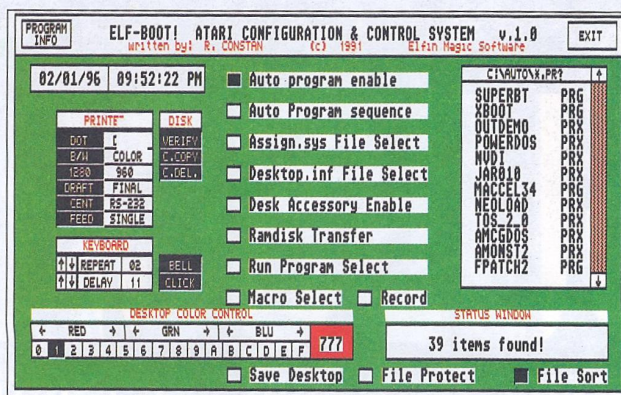
And much much more including many Atari World exclusive releases not available in the Public Domain!

Elf-Boot

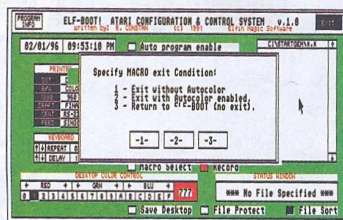
Can't quite bring yourself to cope with Super Boot's looks? In that case, you might like to investigate Elf-Boot. It's a little like XBoot in that you can use the mouse to play with your AUTO folder – just click on the programs you want to load. In common with its peers, it also handles DESKTOP.INFs and the .SYS files that GDOS is so incredibly fond of. Again you can bundle together a number of files, and can save up to fifty of these “macros” for instant execution. Over and above the downright essentials, you can request that files be copied to a ramdisk, and also fiddle with the STs default printer settings (and your starter for ten is to name an application that actually takes any notice of them!).

Sliding in neatly behind this friendly face you will find mountains of documentation to help explain all of the features – why easy to use applications always come with the best documentation must list among the world's greatest imponderables (right up there with “Long Haired Lover From Liverpool”).

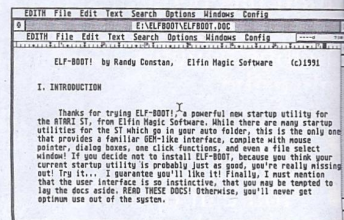
In fact, Elf-Boot looks very good on paper, and admittedly, it does work quite well in practice, with one or two reservations. For instance, all files are not visible on screen at the same time – you need to click a category – and it doesn't look quite as slick as XBoot or Super Boot. Niggles aside, it's well worth a spin...



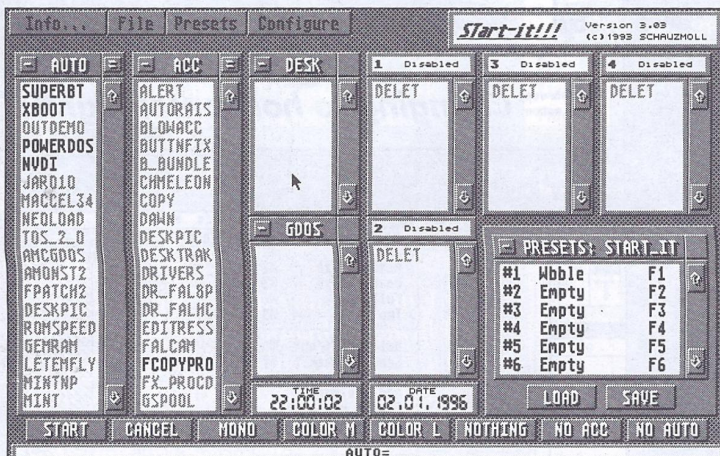
Switching between the different file types can be annoying, especially when the screen is cluttered with useless printer settings!



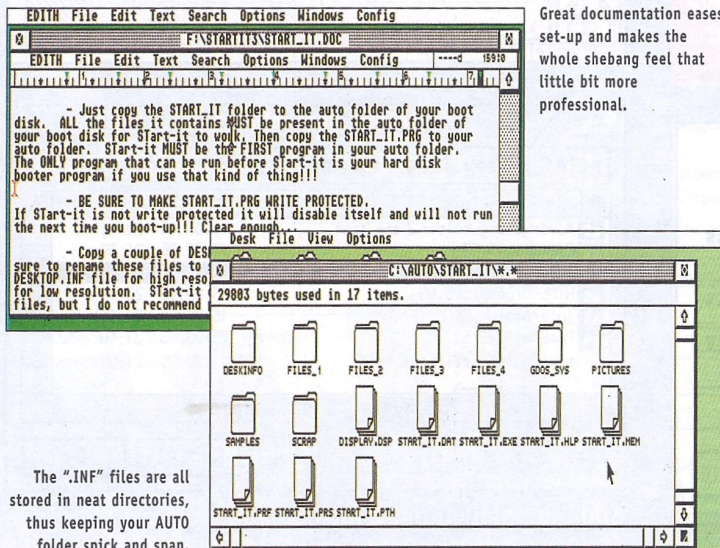
Mouse controls add a degree of sophistication to Elf-Boot.



Don't you just love text editors? – You can read all about them in this issue, you know.



Changes to presets can be made from within the program itself, using tastefully shaded menus and dialogue boxes.



Great documentation eases set-up and makes the whole shebang feel that little bit more professional.

The “.INF” files are all stored in neat directories, thus keeping your AUTO folder spick and span.

Start-It 3

Start-It is another real looker, relying on a tastefully shaded front end to interpret your configuration demands. It can handle up to two hundred desk accessories or AUTO programs and has a preset bank capable of storing fifty entries, the first twenty being tied to the function keys. Of course it's also capable of DESKTOP.INF juggling and in common with Super Boot, you can add your own file types. All of this configuration takes place from the manager itself, so you don't need to worry about external programs and the like. It's also kind enough to store all of the different “.INF” files in separate folders, so your AUTO folder doesn't get too cluttered. It's a class act and the documentation reflects similar attention to detail – all of this for a measly \$10; don't you just love shareware?

As for drawbacks, there aren't any major ones – I suppose you could say that XBoot is a bit more “standard”, oh, and the date display is in the wrong format for the UK. The size of the file lists is also unchangeable, but then again, the layout is fairly sensible to start with, so it's unlikely to cause much heartache. In fact, when you take into account the ease of use and features such as picture loading, sample playing and the range of disk utilities (delete and rename, basically) Start-It emerges as a very strong contender in the boot manager stakes. Go on, install it – it'll make your life much easier...



Where to go...

All of the programs covered here, with the exception of XBoot, are freely distributable in the public domain. Floppystore, Goodman or any other reputable PD library should be able to supply you with an evaluation copy. If you are interested in XBoot, contact System Solutions on 01753 832212.

The Wonderful of OS World

Are you fed up with the way your Atari works? You could spend several hundred pounds on a PC – or you could just change your operating system. The mysterious Xav tells you all you need to know about the cheaper method...

Unless you've been on a pilgrimage to Nepal for the past year, you have probably heard of Windows 95 – the new operating system that is taking the PC world by storm. At long last PCs have a real desktop to work with, and can use long filenames in a pre-emptive multitasking environment. But what has all this got to do with the Atari?

To many people "pre-emptive multitasking" is utter gibberish, and "long filenames" are relatively meaningless.

Admittedly the Atari has had a desktop for the past ten years, but it may surprise you to know that the other features have also been available to us for quite some time – it is simply a question of which operating system or OS you are using.

The black art of operating systems

Operating systems are a black art in which the humble Atari has been quite prominent for some time, but it is only

now that the alternative is standard TOS are really becoming viable. A new operating system will really change the way that you use your machine – quite literally! Your choice of operating system will depend on what exactly you want to do with your "new" computer, and how much you want to spend. So what is an operating system? Why do you need a new one? And what is the difference between an operating system and an emulator?

The Wonderful OS World

Putting the boot in

Every computer has an operating system, or "OS". In essence it is nothing more than a program, and in that respect it's little different from any other application. Operating systems are generally thought of as dividing into two categories – disk loaded and ROM based. In reality every computer has at least a small portion of ROM based OS. On those machines where the OS is loaded from disk, such as the PC or Mac, there will still be a small ROM to tell the machine how to actually access the disk in the first place.

There is an old story of a giant who was so strong that he was able to pick himself up by his own bootstraps (laces). The loading of an OS from disk works in a similar way; without the ROM, the machine would sit and do nothing, but by using just a little code it is possible for the whole machine to "pick itself up" into its starting mode. This is why starting a computer became known as "bootstrapping", or more commonly "booting".

Once it is loaded, the OS acts as a layer between the hardware of the machine, and the applications that the user runs. In principle, if the application only communicates with the OS it should be able to run on any hardware – the OS will perform any interpretation that may be necessary. It is responsible for almost everything in the computer. It handles the screen display, the floppy and hard disks, the ports to the outside world, the mouse, the keyboard and all the other hardware hidden away inside the machine. The only real exception to this is the processor itself: almost all applications will drive this directly, and it is here that the difference between an emulator and an OS lies.

An emulator will make an application think that it is running on different hardware. It will take all the commands

meant for the processor, or any other hardware, and interpret them to suit the existing hardware. Any information being returned to the program is similarly translated. In principle a well written application for another machine (in other words different hardware) will run without modification using an emulator.

A full OS, on the other hand, is different. It makes no attempt to interpret existing code, and any applications you wish to use will need to be recompiled to suit the OS. For example, although a version of the Unix operating system is available for most machines, any applications will have to be compiled to suit the individual hardware. An application from one Unix system cannot usually be run directly on another.

Surely this is at odds with the concept of the OS acting as a layer between the application and the hardware? In practice most similar operating systems, such as the Unix derivatives, have "libraries" of code to interface with particular hardware. The library will have a standardised interface for the programmer, regardless of the hardware it is designed to drive. An application written in a high level language, such as C, would use these libraries to produce code that is compatible with a number of systems. It is only when the code is actually compiled on a system – when it is converted into an executable application – that any system specifics are introduced. The resultant program is unlikely to run on any other hardware, though the original source code could still be recompiled to suit another system.

So you now know what an operating system is, but what's wrong with the OS already inside your Atari? Let me whisk you back through the mists of time to 1985.

Multitasking

Multitasking is the ability for your computer to apparently run more than one application at once. In general it is just an illusion, since each application will be trying to use the same hardware, so only one can actually be operating at a time, but with a well written OS the illusion is hidden. There are two principal ways of achieving this: co-operative multitasking, and pre-emptive multitasking.

Co-operative multitasking is exactly what it says. The currently active application, or the "foreground application" is responsible for relinquishing processor time to the other "background" applications. The most obvious example of this is with desk accessories. In this case the desk accessories are the background applications, and cannot operate until the foreground application relinquishes processor time for them by suspending itself when you call them. If you ever have a program operating intensively, such as a word processor performing a long search and replace, you will notice one of two behaviours. Either you will be unable to select any desk accessories until the operation is completed, or selecting a desk accessory will suspend the operation. Cooperative systems are great with well written applications, but with rogue programs you may find that nothing else gets any processor time.

The second form of multitasking is pre-emptive. This is generally seen as the superior method but is often slower as a result. The concept is that applications are no longer responsible for relinquishing processor time to other programs, but that the OS itself forces them to do so. In theory this happens transparently to both the applications themselves and to the user. The result is that in our earlier example the search and replace would still continue even if the user had a desk accessory, or even another program, as the foreground application.

**Have you heard –
you can get a
complete CD ROM
system for your ST
from only £189.00?**



**System
Solutions**

NEW 

has a special deal for You.



**Phone now to get a
free Mega Archive
CD with your order**

Double or Quad Speed?	Yes
Tray Loading?	Yes
Play Audio CD's?	Yes
Compatible with ST, STFM & STe?	Yes
Mega ST & Mega STe?	Yes
TT & Falcon?	Yes
SCSI Compatible?	No
Hard Drive Required?	No
ICD Link Required?	No

Prices include VAT and may change without notice - UK P&P £10.00 courier. E&OE

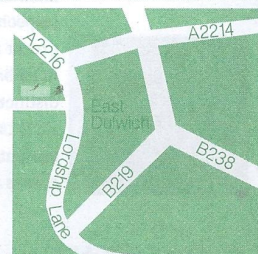


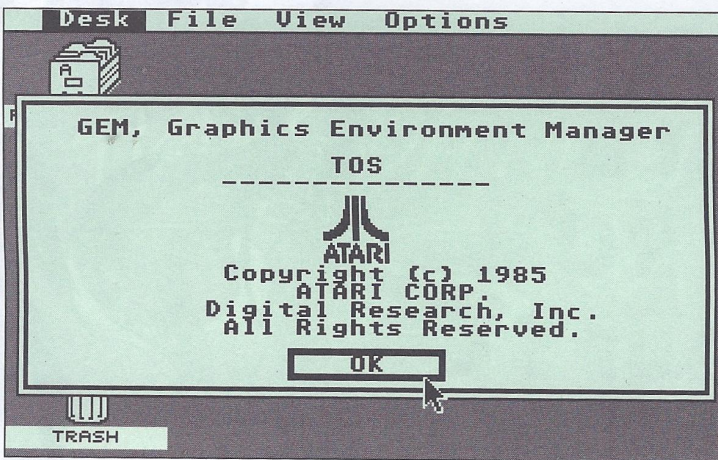
MAIL ORDER,
Windsor Business Centre
Vansittart Rd, Windsor, SL4 1SE
Fax: (01753) 830344

(01753) 832212

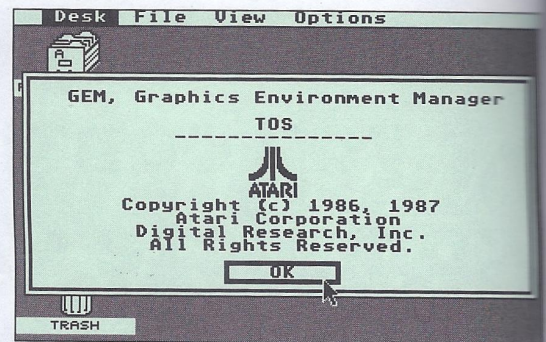
SHOWROOM,
17-19 Blackwater Street,
London, SE22 8RS
Fax: (0181) 693-6936

(0181) 693-3355





The early versions of TOS were slow and buggy.



TOS 1.02 (or TOS 1.2) made a few improvements.

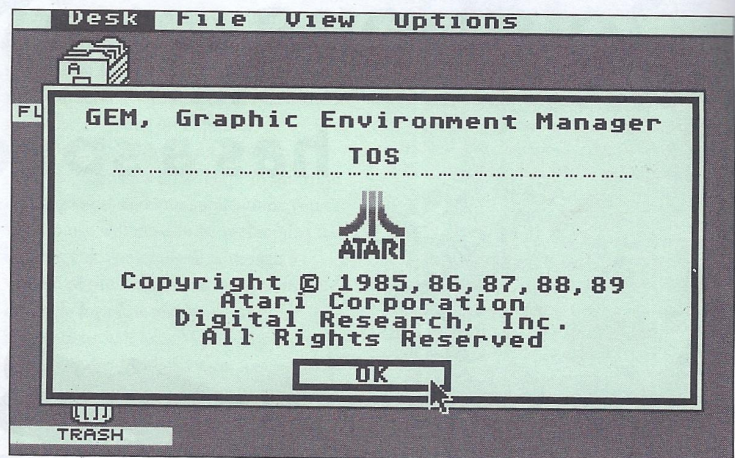
In the beginning...

The very first batch of STs were very expensive, and very primitive, by today's standards. Nevertheless, at the time of their launch, in 1985, they provided a cheap alternative to the "business" machines of the day – the Apple Macintosh, and the PC. Like these early contemporaries, however, the ST also had an operating system that was loaded from disk.

The operating system Atari used was a combination of several readily available systems. Much of the low level code came from an earlier system called CPM, and sat upon this was GEM (Graphic Environment Manager), a user interface developed by Digital Research as an alternative to the system used in the Macintosh. This combination became known as TOS – an unremarkable acronym that stands for "The Operating System".

Within TOS there are several subsections: the CPM routines make up most of what is known as the BIOS (Basic Input/Output System) and XBIOS (eXtended BIOS); the GEM routines comprise the AES (Application Environment System) and VDI (Virtual Device Interface). There are several other subsystems, but these are the most important.

The first version of the OS was, logically, TOS 1.0, though this number was maintained for the second version. In most respects this was identical to the first, except for one important point: it was ROM based. This seemingly minor distinction has had far reaching effects. A ROM based operating system is always present within the machine, and will always appear when the machine is



It wasn't until TOS 1.04 (TOS 1.4 or "Rainbow" TOS) came along that things really got better.

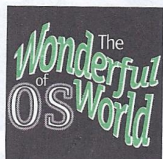
switched on. Unlike the PC or Mac, therefore, the Atari can still be used even after a major problem with the hard drive – ideal for those times when Murphy's law strikes. On the downside, however, a ROM based operating system is much harder to upgrade than its disk loaded counterpart.

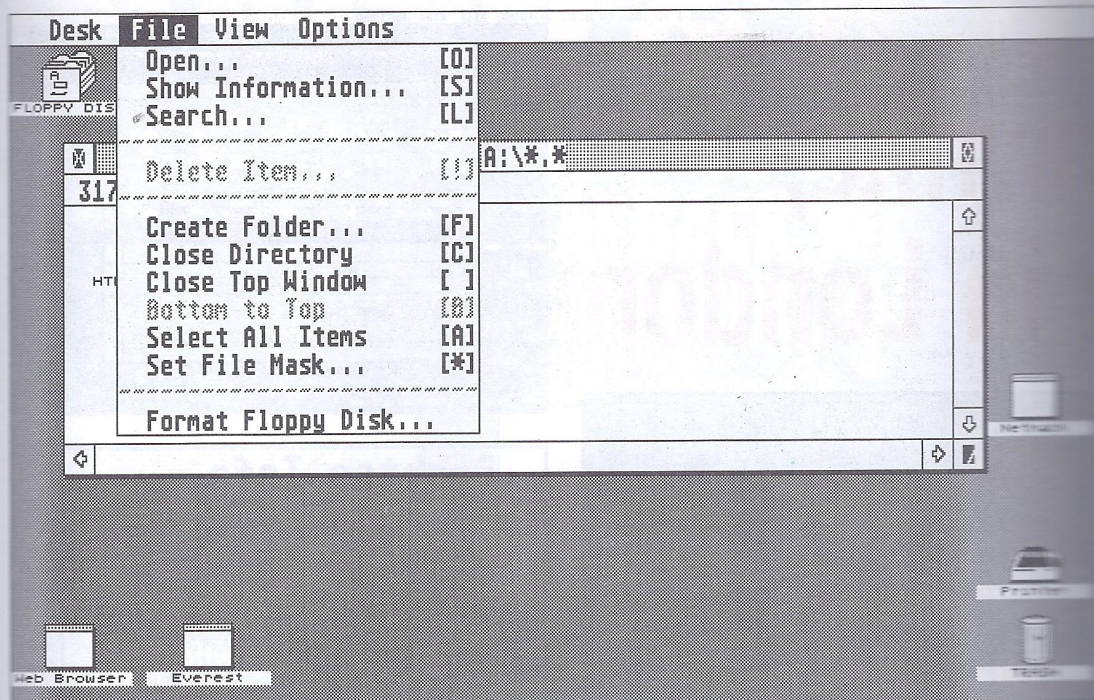
Atari allowed for this disadvantage by making TOS check for a bootable floppy disk during startup. This is usually used to boot games before GEM is initialised, making a little more memory available for them. It also offers the possibility to load a different OS from disk before the internal ROM based system is fully loaded and initialised.

A similar trick is available courtesy of the Auto folder, though this allows a little more of the internal OS to initialise. Using these methods Atari were able to distribute beta versions of their new

operating systems on floppy disks. These only went to developers, however, and because of this Atari have shot themselves in the foot somewhat. Whilst a ROM based OS is great for a user friendly "home" computer, the lack of an easy upgrade path to later versions has resulted in developers having to account for a number of different versions.

TOS 1.0 was quite slow, fairly buggy, and did little more than the most basic file management tasks from the desktop, so shortly after the launch of the STFM, Atari began to ship TOS 1.02, sometimes wrongly called TOS 1.2. This essentially ironed out a few bugs and sped up some of the code, but was still painfully slow when dealing with hard disks. The next version, TOS 1.04 (1.4), was released with the STacy portable and principally improved on the hard disk code.





Size isn't everything

Since a ROM chip (Read Only Memory) is simply a permanent form of memory chip, it is measured in the same units as RAM – kilobytes. The early versions of TOS were on 192K ROMs but with the release of the STe the size was increased to 256K. Consequently it meant that owners of STfMs could only upgrade as far as TOS 1.04 by a simple chip replacement.

The TOS version shipped with the earliest STe models was version 1.06 (1.6). This version proved that the engineers at Atari must only ever use their machines in high or low resolution, because it suffered from a “how could they miss that” bug which prevented the desktop saving itself correctly in medium resolution. There are several patches available in the public domain to overcome the problem, but Atari's own response was to fit a fixed version, TOS 1.62, in all subsequent STe machines. The changes in these versions, over 1.04, were principally to support the features of the STe and had little impact on the user interface.

The move to the STe also saw some standardisation on the configuration of ROMs used. The 192K of the older systems was supplied as either six small ROMs, or two larger ones. In order to upgrade from one version of the OS to another it was essential to order an upgrade with the same number of chips. All the 256K TOS versions, however, were made up of two

ROMs, so the problem doesn't apply when upgrading an STe.

The launch of the Mega STe saw Atari's last range of 256K ROMs. Beginning with TOS 2.02 they quickly moved through 2.05 to the final 2.06, as minor bugs were ironed out. This was by far the biggest improvement in TOS to have happened to date, and third party developers have made it possible to fit TOS 2.06 to almost any ST. On an STfM this requires a board that fits on the processor such as Compo's T-Board. Since the new TOS is a pair of 256K ROMs it will plug directly into an STe, however the change will almost certainly require a small modification to the circuit board.

Top end TOS

With the TT came a version of TOS which was designed to support the new hardware. On the surface it appears identical to 2.06, but adds several new routines to handle the TT's enhanced graphics modes. It went through a number of minor revisions, starting with 3.01, then 3.05, and culminating in 3.06. These versions of TOS were supplied on four chips, totalling 512K.

The hardware in the Falcon required some radical changes in its version of TOS. There were routines to handle the transfer of data to and from the DSP, to manage the highly flexible graphics modes, and to make it easy for programmers to

use the DMA sound system. In line with the new graphics modes, Atari took the opportunity to add a 3D look to GEM as well as its aesthetic advantages, the new makes it easier to see when an object is activated or selected.

Additionally another object type was added to the resource file format, allowing applications to use coloured icons. The best example of this is the desktop itself, where the icons are also “animated” – they change their appearance when selected. There are even a number of applications that allow you to edit these icons to suit your own tastes – my own desktop has a dustbin in a kilt that flashes when I touch anything!

There were several minor revisions to the Falcon TOS. Versions 4.01 and 4.02 were buggy, and didn't have a full implementation of the 3D effects or correct handling of nested menus. Images boxes had a white, non-3D look to them, just like the ST versions but with enhanced 3D buttons. The overall effect looked cheap and nasty and was fortunately fixed with the final version, TOS 4.04.

All these versions were packaged on a single 512K ROM, although earlier versions may have an EEPROM – a variety of ROM which can be erased and reprogrammed. Because of this difference, the upgrade price to 4.04 will depend on what version of ROM you have – EEPROMs are less expensive to upgrade.

and a 3D look to GEM.

Meanwhile, back in London



TOS 4 introduced animated colour icons...

In 1990 a Londoner called Eric R. Smith released a program called "MiNT" on to an unsuspecting, and largely uninterested, Atari community. The London that he hailed from is London, Ontario, and it seems that in these colder parts of the world, people have little more to do than sit at home writing Unix-like operating systems (see boxout).

MiNT, a recursive acronym for "Mint is Not TOS", was really quite an incredible achievement. It effectively replaced large areas of TOS with a pre-emptive multitasking system (see the "Multitasking" boxout) that was largely compatible with Unix. In addition, however, it still managed to maintain compatibility with TOS, thus allowing the two systems to run concurrently.

The earliest versions were designed to work in one of two modes. Firstly the machine could either be made to boot into a command line interface, giving a system equivalent to older, text based Unix machines. Alternatively MiNT could be used to run a number of *.TOS or *.TTP (in other words, text only) programs simultaneously, whilst also running a single GEM application using the version of GEM from the machine's own ROM.

Having realised that the rest of the computer world had moved towards multitasking, Atari set about writing their own system to offer this to the humble ST range. Given the healthy development of MiNT, they decided that this would be the

perfect core to their new operating system and licensed it from Eric Smith. They also gave him a job, although he left Atari late last year. Having spent so long being proud of their GEM interface, it was only right that their new system should also be able to multitask GEM applications. A new version of the AES was written, offering a number of advantages over the older ones, not least of which was the ability to multitask.

The complete package – MiNT plus AES – was given away to owners of the Falcon, and was made available to other Atari owners on a commercial basis. This was MultiTOS.

Unfortunately the new AES was slow. It was not really optimised for multitasking, and made the whole system barely workable. Even on a 16Mz 68030-based Falcon it made the system seem sluggish and unresponsive, and on an ST it could be downright painful to use. This sloth managed to put a large number of people off MiNT, and a badly archived distribution on a magazine cover disk helped to ensure that most people's first contact with it was a less than happy one. Nevertheless, the long term users persisted, and despite little coverage in the Atari press, MiNT based systems are still being actively developed (I'm using one to type this very article).



Desktop Info...

Control Panel

✓ / \ DESKTOP
Freedom™
Imagecopy 4
TOS Programs

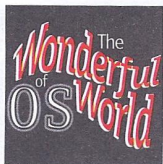
Several GEM applications can be run simultaneously using MultiTOS.

I'm a gnu...

Many of the applications mentioned here are "freeware". This is particularly true of much of the Unix software in use with Linux, NetBSD, or MiNT, which almost invariably is released with its source code, as dictated by the "Gnu public license". What this refers to is a legal document drawn up by a group of programmers, which defines a set of requirements for any release of the software.

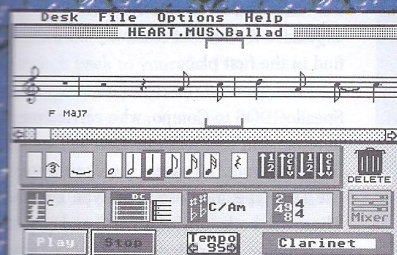
The motivation behind this license has to do with the question of the ownership of a computer program. Most software publishers regard the purchase of software as a kind of indefinite leasing arrangement. You are free to use the software for as long as you like, but modifications or updates may only be carried out by the software company itself. The Gnu principle is to treat software as though it's a car. When you obtain the software, you own it and should be allowed to treat it as you wish. If you have enough technical knowhow you should be allowed to modify it or add to it without restriction.

A common mistake is to assume that freeware means "free of charge". Whilst most freeware is available for unrestricted download, the "free" actually means that the source code is freely available. In other words, even a commercial product can be freeware, provided the source code is either supplied in the package, or is made available on request. There are, in fact, a number of companies making a quite healthy living out of selling freeware applications to the PC Linux market.



SOUND & MUSIC

ANY ST CAN BE USED TO SAMPLE SOUNDS,
RECORD AND PLAYBACK MIDI WITH OUR
AMAZING SPECIAL OFFER...



Music Maker software to work with MIDI files.

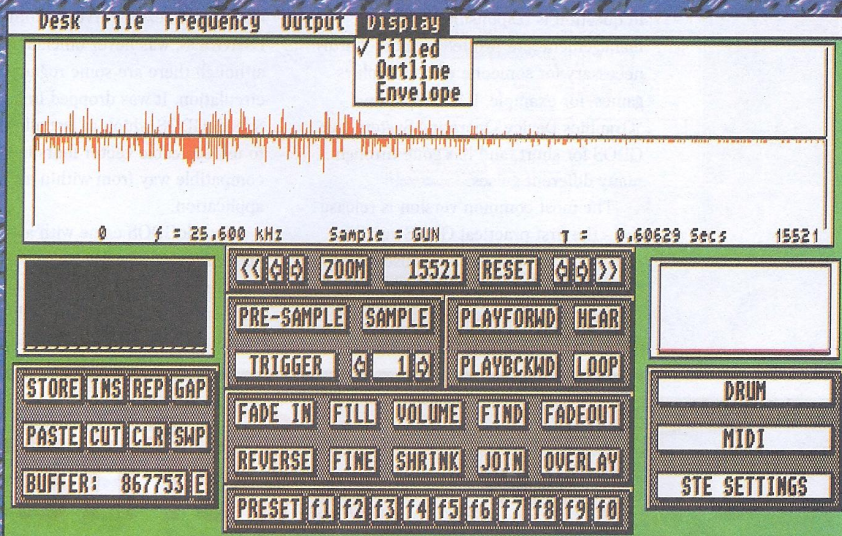
£19.99 is all you need to unlock the world of MIDI and sampled sound with our Sound and Music package. This amazing pack includes a sound sampling cartridge Sample Master Plus as well as Music Maker (ST FM) and Music Maker Plus (STe) software.

With its built in MIDI ports, the ST is any musician's dream. The Sound and Music pack combines a sound sampling cartridge with a powerful music package and drum machine. "Grab" sounds from your favourite Video or Album, then edit and mix them to put together amazing special effects.

The pack includes Music Maker Plus, the complete package for the beginner to computer music, its three main sections let you compose, edit and listen to a variety of music whose content is limited only by your imagination. The Composer allows you to write music directly to the computer screen and play it back through the ST's hardware, the built-in MIDI Recorder records anything you play on a MIDI instrument connected to the ST's built-in MIDI ports and the Drum Machine allows you to design and edit a drum beat using a number of different percussion instruments.

To order by credit card,
Delta or Switch call
01487 773582
(24 hours)

E&OE



The Sample Master cartridge comes with software to edit your samples.

Atari STe owners can even incorporate samples and effects using the Sample Master cartridge.

The Sample Master Cartridge is a sound sampling cartridge that plugs into any ST computer. With the sampling and editing software provided it's possible to record from a suitable sound source such as a CD player. Once sampled and stored inside your ST, sound can be played back through a TV Monitor or, for STe owners, via the phone-sockets. Sampled sounds can be edited in a variety of ways to produce stunning sound sequences and amazing special effects. The Sound and Music pack is an ideal introductory add-on to sound and music on your ST.

MUSIC MAKER
£19.99
including VAT and P&P.

COMPO
SOFTWARE
For all your Atari computing needs!

Yes I'm going to start using my ST for music

Please rush me a copy of Music Maker at £19.99 including VAT and Postage

I wish to pay by ☐ Cheque ☐ Credit Card ☐ Switch

Name

Address

Postcode

Card number

Valid from Expiry date If Switch Issue Number

☐ Tick here if you also want a free copy of our latest catalogue



Now send this order form to:

COMPO Software, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambs PE17 2PF.

The write type

There is one part of TOS that Atari chose to leave out of their ROMs. In many respects this was a good idea since it kept memory requirements down for those users that did not need it. The part in question is responsible for text management and printed output – hardly necessary for someone who only plays games, for example. It is called the “Graphics Device Operating System”, or GDOS for short, and has gone through many different guises.

The most common version is release 1.1 – the first practical GDOS version. GDOS 1.1 allowed the ST to use bitmapped fonts, and to print to a small number of printers. It was a necessary evil for users of Timeworks, but most serious packages

steered well clear of it in favour of their own systems.

A later version, FontGDOS, received a limited distribution. It was better than release 1.1, but still retained the bitmapped fonts. Its main feature was the addition of bezier curves. Another version, FSMGDOS, was never officially released, although there are some rogue copies in circulation. It was dropped in favour of SpeedoGDOS which at last allowed the ST to use scaleable vector fonts in a compatible way from within any application.

SpeedoGDOS came with a couple of applications that make the generation of the dreaded GDOS configuration files as painless a task as it's ever likely to become. The main problem with Speedo was that it

would only work with Bitstream Speedo fonts. These are the fastest of the vector font formats, and so are the best suited to a relatively slow machine like the ST. Unfortunately they are a “closed format” – they can only be created under license from Bitstream, and are therefore expensive to buy and relatively hard to find in the first place.

Atari licensed the rights for SpeedoGDOS to Compo, who carried on development to release version 5. This finally offered Atari users the chance to use TrueType and Postscript Type 1 fonts. These are both “open formats” and are common on other platforms, so there are a large number of these fonts available in the public domain.

The alternatives

Atari are not the only people to have worked on TOS over the years. A number of third party developers have implemented their own “extensions” to the Atari standard. Many of these only replace parts of the operating system – the parts Atari “couldn't reach” like the file selector, GDOS, or the print routines for example. The most famous of these is probably NVDI, which replaces much of the TOS graphics code with faster, optimised routines. It also acts as a GDOS replacement, with the latest versions supporting the same vector font formats as SpeedoGDOS.

There have also been attempts to replace larger areas of TOS. Geneva, for example, is an AES replacement which

gives any ST the equivalent of a new version of GEM. It also offers several other advantages, and can pre-emptively multitask using MiNT, or cooperatively using its own code.

The biggest TOS replacement, however, is probably MagiC. This was largely written by the authors of NVDI and applies the same principles of replacing the slow Atari routines to the whole operating system. The result is a pre-emptive multitasking system that still runs at a remarkable pace. Perhaps even more incredible is that MagiC is also available for the Apple Macintosh, allowing GEM applications to run on another, more powerful hardware platform.

Such systems are not new, though. Many programs have been written over the

years to expand on, or replace, parts of TOS. There have been dozens of file selectors, for example, ranging from those offering minor improvements over the TOS version, to newer programs, such as Selectric or Freedom, which offer file management tools that would not be out of place on a replacement desktop. There are the replacement desktops themselves, such as the commercial Neodesk, or the shareware Thing. These offer various levels of functionality, but almost all are superior to the standard Atari offering.

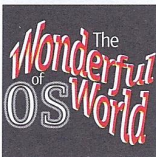
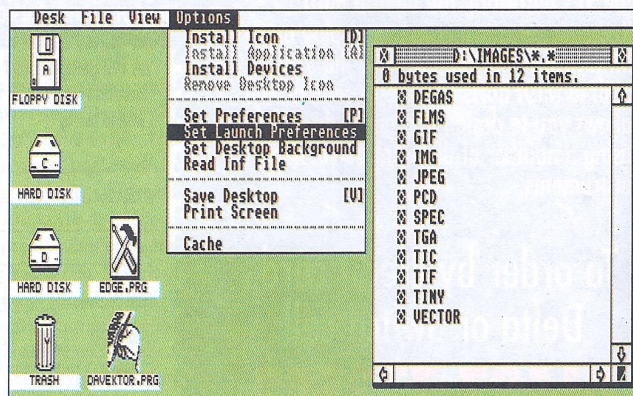
So just what operating systems are currently available? There are actually quite a few, but they can be broadly split into three categories: TOS replacements, Unix based systems, and proprietary systems.

TOS 2.06

This was Atari's last official TOS release for the ST range of computers, and can be fitted to any ROM based ST. On older (pre-STe machines) this will involve some kind of adapter, and if you are not experienced with electronics, it is probably best left to a professional.

On STe machines the new ROMs just

With TOS 2.0x you can assign keyboard shortcuts to menu items.



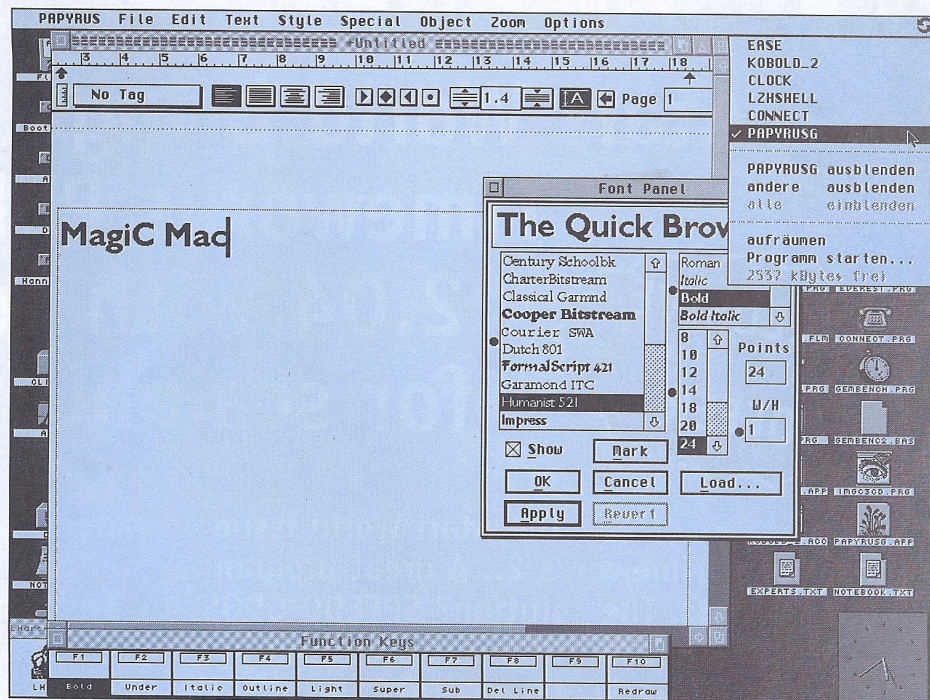
going in, although there will usually be some minor surgery on the motherboard involved, so a similar warning applies. The modification is quite simple, however, and anyone with a little experience at wielding a soldering iron should find it relatively straightforward. If you have a Mega STE, you probably already have TOS 2.06. If not, the upgrade is incredibly simple, requiring nothing more than undoing one screw and swapping the chips.

In addition to these TOS upgrades, most companies can also offer switchable upgrades. These allow you to have the benefits of TOS 2.06, but with the ability to switch back to your old TOS version. This type of upgrade is particularly important if you have some software that you still use, but which is not 2.06 compatible. Many games fall into this category, as does a lot of STOS software – although there are applications which will fix STOS programs to make them work. If you use a lot of modern software, you may find that you don't actually need a switchable upgrade. Since upgrading my own STFM to TOS 2.06 I have only ever switched back twice.

The upgrade affects many areas of TOS, but none more noticeably than the desktop. If you use the standard TOS desktop all the time, rather than a replacement, then the new version will seem like a godsend. No longer do you have to navigate through layers of folders to reach your most regularly used applications – you can simply drag them to the desktop where they can be made to appear every time you boot up. Alternatively you can assign them to one of the function keys, or have any program run automatically at boot up – even a GEM application.

Furthermore, all desktop menu items can be assigned a keyboard shortcut. On my own system hitting the spacebar will close the top window, which makes it very quick and easy to clear the desktop. There are also new menu options, such as delete, so with a keyboard shortcut you need never drag anything to the trash can again. In fact, there are also shortcuts for opening drive windows, so if you wanted to, you could remove all the drive and trash icons from your desktop to make more space for application icons.

Essentially, if you want to stay with an official Atari OS, or are happy with your existing TOS, but wouldn't mind a little more functionality, then 2.06 is probably your best bet. The price varies depending on the supplier, your machine type, and whether or not you want a switchable upgrade, but should be around £25 to £60.



MagiC – an excellent TOS replacement.

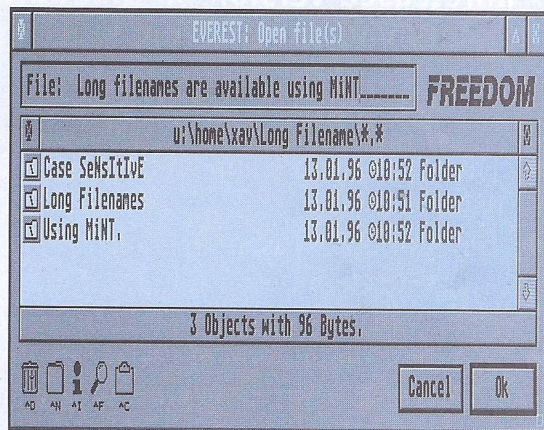
MagiC

MagiC was written as a replacement for the official Atari versions of TOS and manages the remarkable feat of multitasking fast enough to be viable on even an 8 MHz machine. The first few versions of MagiC would only run on an ST or TT, so Falcon owners have had to wait until now to reap the benefits. The latest version, MagiC 4, not only runs on the Falcon, but also incorporates some of the more advanced features of MiNT and MultiTOS.

Adding these features can only serve to make it even more popular, since an increasing number of applications are taking advantage of these MultiTOS extensions. The most obvious example of this is the support of loadable file systems – one of the principle reasons for the increasing popularity of MiNT.

This is most commonly used to allow Atari machines to utilise the Minix filesystem, which allows a number of Unix-like features, including mixed case filenames of up to 126 characters. For example, instead of "LETDRJON.DOC" you can call your file "Letter to Dr Jones re new book" – it's a lot more intuitive.

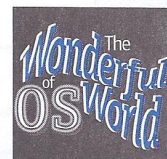
A growing number of applications are supporting long filenames, as their usage has been well documented since the official release of MultiTOS. Unfortunately it seems that the loadable drivers for MagiC are of a different format to those of MiNT, so it may take a little time for the



With the Minix filesystem any Atari can use long filenames.

benefits to be fully realised, as the existing drivers will need to be converted.

MagiC has always had its own desktop, MagiC Desk, although on earlier versions this was fairly limited and offered little more than the original Atari version. Consequently MagiC was often bundled with the Ease replacement desktop and whilst it is still available like this, MagiC Desk itself has seen enough improvements for Ease to become more of a luxury than a necessity. This means that a practical MagiC system is available starting at just under £70, though more serious users may still appreciate the additional features available from Ease, Kobold (a file management utility) and NVDI. Consequently the UK distributors, System Solutions, offer MagiC in several bundled packages with one or more of these applications.



UPGRADE TO TIMEWORKS 2.04

Atari World brings you Timeworks Publisher 2.04 with support for scalable fonts



The Atari World issue 4 reader disks brought you the sensational Timeworks 2.. A great program except for one thing - its limited built in fonts. The solution? SPEEDO GDOS and Timeworks 2.04 exclusive to Atari World! Speedo GDOS was produced by Atari as the solution to the lack of fonts on the ST, TT and FALCON 030. Timeworks 2.04 is a previously unreleased version of Timeworks Publisher that supports SPEEDO GDOS and lets you specify font sizes from within the Timeworks program itself.

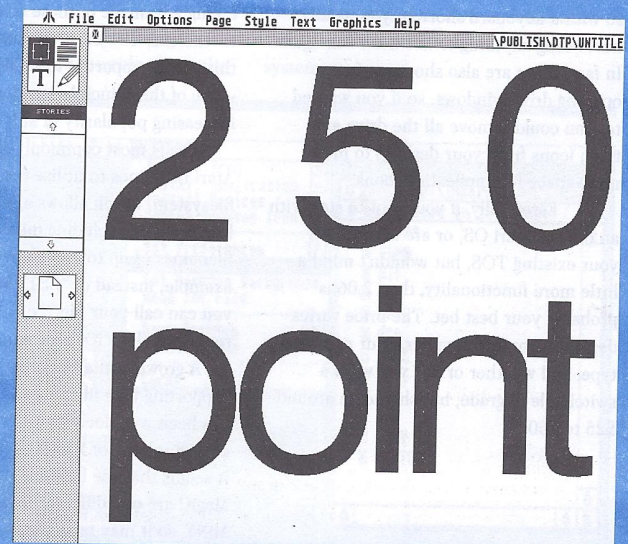
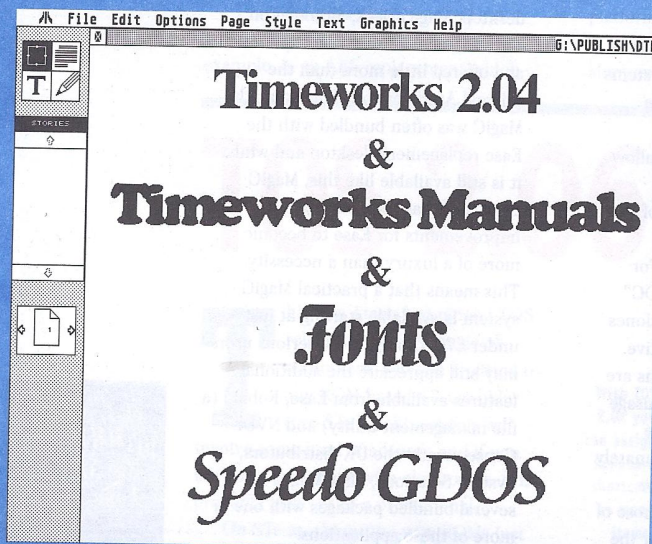
- ◆ The first Falcon compatible Timeworks Publisher.
- ◆ Timeworks 2.04 is an upgrade to the Atari World Readers Disk 4 release. You need to have both disk sets to install Timeworks 2.04.
- ◆ Requires a minimum of 2MB of memory and a hard disk (4MB of memory recommended)
- ◆ Easy to install....
- ◆ Requires either SPEEDO GDOS 4.0, 4.2, 5.0 or NVDI 3.
- ◆ Works with all standard printers

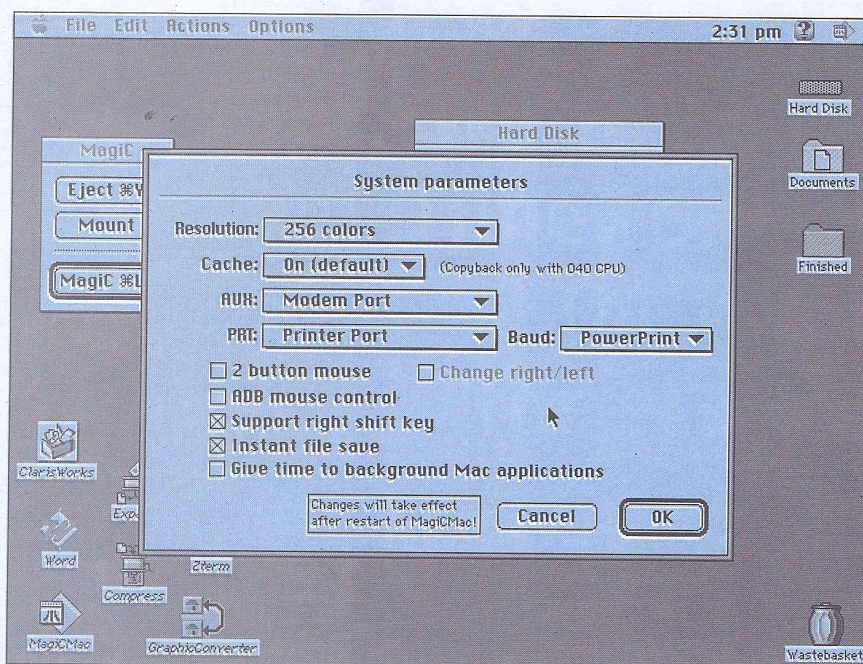
Timeworks 2 manual

Get Speedo GDOS
and Timeworks 2.04
for just £49.99.
Save £50 when you also buy
two font packs.

GST, the producers of Timeworks Publisher 2, were always renowned for the quality of their manuals. The Timeworks 2 manual is a model of clarity and will help any user get the best from this great program. We have the original manual available for just £14.99.

The full manual for just £14.99





MagiCMac – run Atari software on a Mac.

MagicMac

Imagine, for an instant, that Atari has suddenly relaunched itself into the computer market with a system based around a new chip. Since it will not run standard Atari software Atari bundles it with an emulator to run the old Atari operating system.

The new computer is considerably faster and more powerful than any system Atari has sold before, but, as usual, suffers from some "compatibility problems". The result is a system that will run most well written GEM software, but which has problems with games, or other programs that take liberties with the hardware or OS.

You can come back to reality now. Atari haven't returned to the computer market and there is no new machine. Apple, however, have released a computer system based around the PowerPC chip,

and have suffered the same problems as our theoretical Atari machine. Older Apple computers used the same type of processor as the ST range, so to maintain compatibility Apple bundle all of their PowerPC based computers with an emulator that makes applications think they are running on an older chip.

By some very clever programming, it is possible to run a version of MagiC on the Apple machines. This version is called MagiCMac, after the name Apple gave to its series of computers – the Macintosh. It was actually written for their older machines, but with the emulator supplied by Apple it will also run on the newer, more powerful hardware. The result is effectively an Atari operating system running on some potentially very powerful hardware – regardless of the Apple badge, a machine running MagiCMac behaves like

a very fast Atari running MagiC.

Whilst this may sound like the ideal way forward for the Atari market, MagiCMac is not without its restrictions. Sound support is quite limited, and like MagiC on the ST it will not run badly written software. For running good quality GEM applications, however, it is a dream come true. Many programs that previously seemed sluggish, or were tied down by the graphics quality of the Atari range, really come to life – in some cases even outperforming their Macintosh counterparts. Pagestream is a good example, with the infamous slow screen redraws becoming a thing of the past.

MagiCMac starts at about £150, including the Ease desktop, but excluding a Macintosh! Prices of older Macs have been plummeting as long term Apple owners have been rushing to buy the PowerPC machines, so you might be able to find a bargain. System Solutions distribute MagiCMac and should be able to advise you about which Mac to buy if you decide to take the plunge.

Unix

Unix was written in the early seventies as a multitasking, multi-user operating system and has grown in sophistication and popularity over the years. Its origins were on large mainframe computers and it was first used in educational and research institutions. With its growing popularity it is being used in more and more commercial environments and is still at the very heart of the Internet.

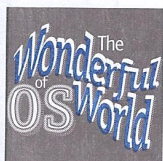
With the increased power of modern microcomputers, it was inevitable that versions

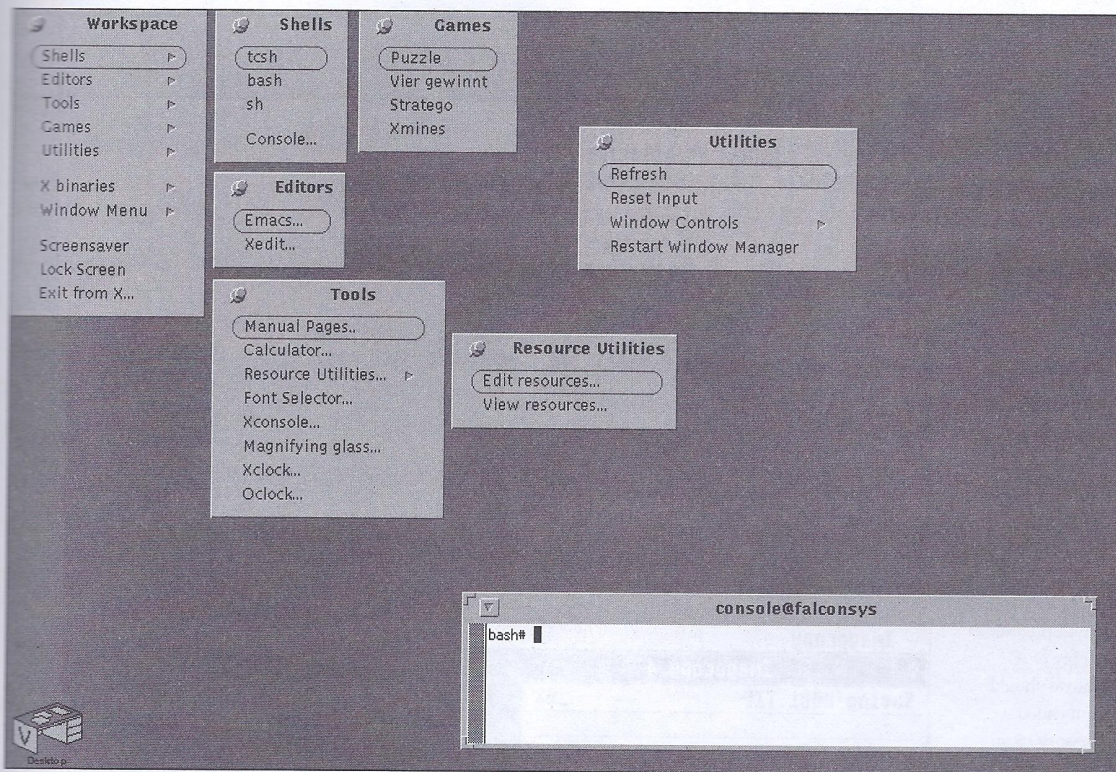
of Unix would be created for home or office machines. The best known of these doppelgangers is Linux, but there are several others available, the most important of which are Minix, NetBSD and MiNT.

The systems on which Unix was originally designed to work were not capable of the graphic displays with which we are so familiar. Originally all interaction was via obscure command line instructions, and it was this that helped to keep Unix so elitist. The advent of a standard graphical interface for Unix systems has changed that, in the same way that the introduction of Windows has fuelled the rise of the PC in a way that its command line origins could never have done. The Unix graphical interface is called "the X windowing system", or

simply X. All the current Unix like implementations on the Atari (Linux, NetBSD and MiNT) are capable of running X, though the hardware requirements are fairly hefty.

If you wish to turn your Atari into a Unix machine, you will find it almost imperative to buy a book on the subject. There are usually plenty to choose from in most major bookshops. Buy a book for system administrators, since that is what you will effectively become, but it may also be useful to have a users guide. My own personal choice here is the Newnes "Unix Pocket Book", which manages to succinctly describe the most common commands, yet also covers some basic administration.





Linux

In 1990 Eric Smith was not the only person writing a Unix like operating system. A Finnish student, Linus Torvalds, was creating a new OS for the IBM PC as part of a college project. He called it Linux and released it as freeware (see the "I'm a gnu..." boxout) with the result that, like MiNT, it rapidly gained a following on the Internet, and has now developed into a viable alternative to a genuine Unix system.

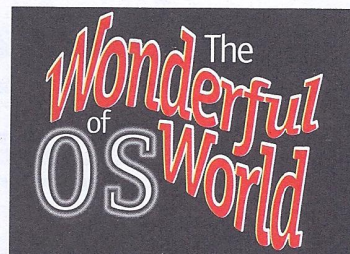
It was not long before Linux was ported to other platforms, including the Atari. It requires a 68030 or higher, and a maths coprocessor, which limits the choice of machine to either a Falcon, TT or an ST

fitted with a processor upgrade or accelerator such as the PAK 68/3. The Falcon does not have a coprocessor as standard, but fitting one is a trivial matter since a socket is provided on the motherboard for it. A coprocessor costs about £25.

Linux is now extremely similar to System V, one of the official Unix releases, so a large number of applications have been ported across to the new OS. Among these applications are a large number of Internet utilities, but don't think that Linux is an easy way onto the Internet. Like any other version of Unix, a great deal of technical knowledge needs to be acquired in order to use a Linux system effectively, and it is best suited to people who either already know a lot about Unix, or who are prepared to put plenty of time and energy into learning about it.

If you have access to the Internet all the files necessary for a Linux system are

available for free download. A complete distribution, like any form of Unix, consists of a large number of files, so downloading it all takes a long time even with a fast connection. A complete Linux distribution is available on CD ROM, and this is by far the best method of obtaining it. It was reviewed in issue 7. If you really want to download it all, or if you simply want more information, then a good starting point is the Linux homepage on the World Wide Web (<http://www.linux.uk.org>).



Net BSD

Unix has gone through several incarnations over the years, and while it is quite common to refer simply to Unix, strictly speaking there are currently two major versions, System V and BSD. Whereas Linux attempts to behave like a System V implementation, NetBSD occupies a similar position but based around a BSD system.

In practice there is little to choose between Linux and NetBSD. They are both freeware and actively developed on the Internet, and are both at a similar level in terms of features and application support. NetBSD has not been in development for as long as Linux on the PC, but the Atari versions of both are of a similar age. NetBSD is not currently available on a CD ROM distribution, which makes Linux the easier of the two to obtain, but if you intend to download the files, then the decision is a more difficult one.

If you use either System V or BSD on another system, then you will probably

find it easiest to use a similar system on your Atari. Another factor in favour of NetBSD is that the versions for other machines incorporate a floating point emulator, eliminating the need for a coprocessor. At present the Atari version lacks this emulator, but it is apparently being worked on and should be available soon. Unfortunately NetBSD only works on the Falcon and TT at present, although support for the PAK 68/3 upgrades is planned for the near future. Further information can be found on the web (<http://www.netbsd.org/Ports/atari/index.html>).

MiNT

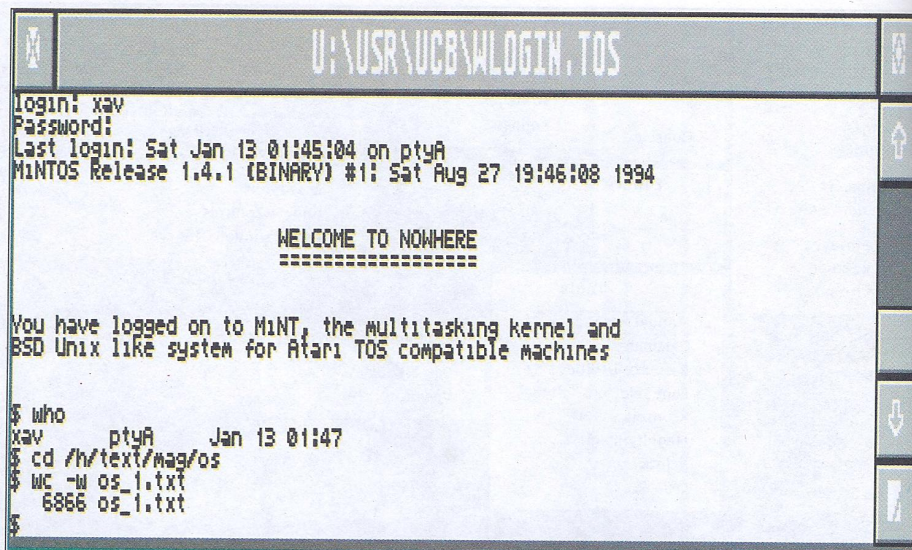
Despite the speed problems of MultiTOS, MiNT itself has a great deal to offer. It falls into a category all of its own, somewhere between MagiC and NetBSD. On the surface it is simply a TOS replacement, and on first installing it, it can prove to be quite an anti-climax. Without any MiNT aware software, your Atari will look, and behave, almost exactly as it did before.

In order to get it to do anything really useful, your first port of call should be the Internet. Very few public domain libraries deal with MiNT software, despite its growing popularity, so you are likely to have to do some trawling round the 'Net in order to obtain a healthy supply of applications. Your first download should almost certainly be a program called Toswin. This runs as an accessory or an application, though the former is more useful for a non-MultiTOS setup. Toswin allows you to run *.TOS and *.TTP programs within a window, and on a MiNT system this means they can multitask with each other, and with a single GEM application.

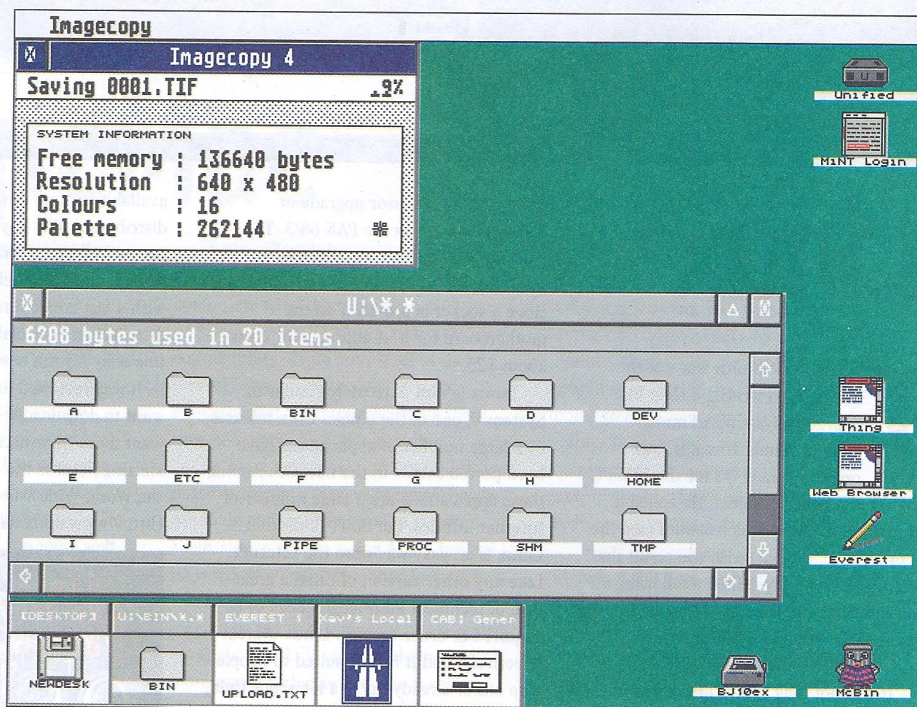
MiNT effectively adds a level of BSD Unix compatibility to your Atari, but with the advantage that it maintains TOS compatibility. Consequently there are a large number of Unix applications that have been ported across. Older Unix systems use a command line interface (CLI), which can be emulated on the Atari by running a shell (the command line program itself) before GEM initialises. You can also run a shell from Toswin, so you can have access to a CLI from within a GEM application.

MiNT can also be run with a multitasking GEM interface. The most obvious example of this is MultiTOS, but there are a few alternatives available. The version of GEM supplied with MultiTOS includes AES version 4.0, however Atari have released version 4.1 to developers. This includes a number of improvements, the principle one being the ability to iconise windows. Most AES replacements, or new TOS systems such as Geneva or MagiC, include this facility.

You may have read a little about MiNA, or "MiNA is Not AES". This was a project to develop an alternative to the AES supplied with MultiTOS, by WINX author Martin Osieka, but suffered a major setback when his Atari broke. It is possible that MiNA may still see the light of day, but it is not anticipated in the near future. On the other hand, a German programmer, Jens Hiescher, has written a



Toswin running a typical Unix shell from GEM.

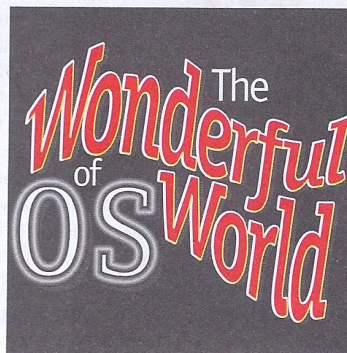


AES 4.1, and its replacements, allow you to iconise windows.

replacement for AES 4.1, which he called Signum. It has recently been bought by Overcan and released commercially as N.AES. Since Signum had no desktop, N.AES is shipped with a version of the Thing desktop, called N.Thing. It also incorporates a number of additions over AES 4.1, including keyboard shortcuts for the window gadgets, the ability to hide applications, and even an optional menu bar, which disappears (giving extra screen space) if an application doesn't need it!

If you don't want to spend any money, there are a couple of projects to develop free AES replacements. The first is oAESis, which is available on the web (<http://www.dtek.chalmers.se/~d2cg/oaesis/>). The second, XaAES, is being developed

in the UK. Whilst not finished yet, it has progressed quite far and will be released as public domain.



Other operating systems

Wonderful World

Over the years the Atari platform has seen a number of different proprietary operating systems. You should generally steer clear of any that you don't know anything about – no matter how cheaply they are being sold. In particular, although the Minix file system is frequently used with MiNT, the Minix OS itself is no longer supported on the Atari and should be avoided.

In fact there are only a couple of proprietary systems that are currently of interest – SMS, which is covered elsewhere in this issue, and Omen. Omen is an attempt to produce an OS that will run on several platforms, but unlike any other OS it will allow a program written on one platform to run unchanged on another, without having to be recompiled. It is planned that Omen will be released on the Atari, Mac, Amiga and the PC, when fitted with a 680x0 processor card. The Mac version is "almost finished", and the PC

version is due later in the year.

In terms of usage Omen has to restrict itself to the lowest common denominator of the various machines. The right mouse button, for example, becomes redundant since the Mac only has one mouse button. Also it is restricted to standard Atari resolutions, regardless of any hardware additions, although the Omen screen is twice as high and scrolls as you hit the top or bottom edge. Like any OS, Omen requires you to become used to different ways of interacting with your data, some of which will seem quite strange at first. In addition it will not run TOS or GEM applications, though the package does come with a number of basic utilities.

Omen is available from Floppyshop for about £20 and a developers kit is available for £12, which has recently been upgraded to include support for C and Forth programmers. Both these prices are due to rise with the next version.

Conclusion

Whatever you use your Atari for, there's an operating system upgrade that will allow you to work more easily, or that will add a whole new dimension to your computing. Even if you primarily play games on it, a switchable TOS 2.06 upgrade will give you compatibility with an even wider range. For more serious users a multitasking system is a must – whether it be the cooperative multitasking of Geneva, or the pre-emptive variety of MiNT or MagiC. Your choice will, of course, depend on how much you want to spend, but you should also consider the amount of support available.

Ultimately you have to decide whether or not an upgrade is worth it. Upgrading your OS is not just a question of money, but also of time. Whatever system you use, you will need to put time and effort into

finding its strengths and weaknesses, bugs and features. You may need to track down software, books, or other users, and you have to be prepared for the fact that things can, and all too often do, go wrong. That said, there is something strangely satisfying about being able to set up an OS from scratch, and about gradually tweaking it and adding new applications until it becomes second nature to you. You will find that when you have this level of control and understanding, computing becomes more pleasurable than before and you can work far more quickly and constructively.

It is impossible to advise people about which OS to use. For my money, if you still find yourself using standard TOS a lot then 2.06 is a must. If you already know a bit about Unix, then Linux or NetBSD might be just the thing for you, but if you are just getting into it, then MiNT might be

better, since it has lower hardware requirements, and will still allow you to access the comfort of the GEM interface for editing configuration files. If you have the hardware though, the CD version of Linux is easier to set up. If you just want a TOS compatible system then look at Geneva, and especially MagiC, but if you really want to take the plunge into a totally different system then Omen might be for you.

Next time you hear someone extolling the virtues of Windows 95, just consider that long filenames and desktops have been a feature of the Atari world for some time now. Far from being a dead computer, the Atari is still capable of holding its own, even against the heavyweight marketing power of the PC world. Your Atari is just as capable for many applications as any other platform, so pick an OS, reboot your machine, and enter another world...

Harder SCSI Drives

If you are about to buy a hard drive – make sure you ask your supplier for:

- ★ 2 year warranty on parts and labour
- ★ high quality performance drives
- ★ new drive mechanism (no refurb drives disguised by new cases)
- ★ true SCSI chainable systems
- ★ a helpline with expert staff

MaxiS Singles

120Mb Quantum	£229.00
270Mb Quantum	£279.00
105Mb SyQuest	£369.00
270Mb SyQuest	£499.00

MaxiS Doubles

120Mb Quantum &	
105Mb SyQuest	£459.00
270Mb Quantum &	
270Mb SyQuest	£659.00

MiniS Drives

120Mb Quantum	£209.00
270Mb Quantum	£259.00
Add The Translator for STFM or	
STe computers for only £40.00	

Come to System Solutions for quality and service.

**UNIQUE
TWO-IN-ONE
SYSTEM**

Buy one drive now - add one drive later



To place your order, call 01753-832212

For all this and more, fill in this coupon, and get your own copy of the 52-page, Colour Spring Catalogue, ***ABSOLUTELY FREE***

Name:

Address:

Town: Postcode:

Send to System Solutions, 17-19 Blackwater Street, London SE22 8RS.

E&OE
AW Issue 1



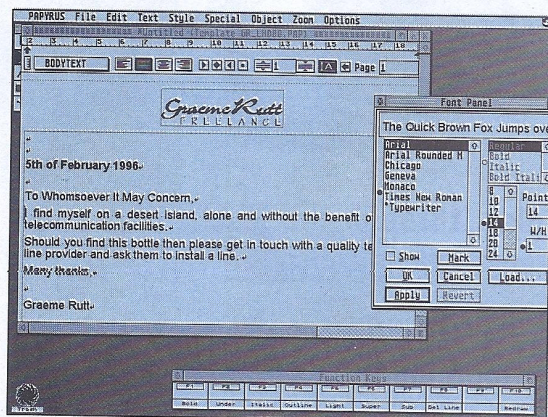
MiniS



SCSI Hard Drive of the Year 1994

STranded

Next up on the Desert Island is Graeme Rutt – long time writer for *Atari World* and by his own admission a bit of a “sad Atari power user”.



Papyrus Gold in action, the best Atari WP of all time.

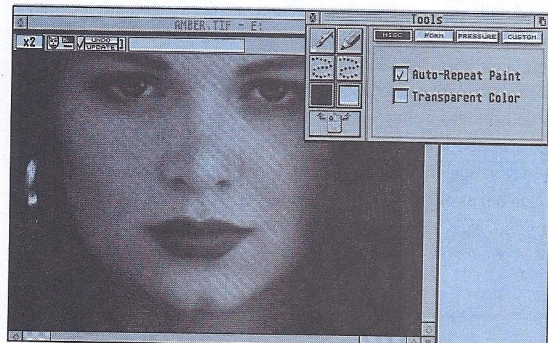
So here I am. Cast stray and alone on a desert island. But wait! What's that I spy? Could it be Kim Basinger and a bottle of Jack Daniels that never runs dry? No. Damn. I'll never get the sand out now.

I suppose I'll have to content myself with this Atari gear that's just washed up on shore. I've chosen to go with 3 different software setups that cover three separate areas of computing I enjoy. If given a choice I'd like to run the lot on a fast Mac, via MagiMac. A better, faster and more colourful TOS computer is hard to imagine.

The written word

Whilst abandoned on this isle I'd like to spend some time writing and for that you need a word processor – and the only one worth the name on the Atari is Papyrus Gold. Another amodal, highly-GEM, hugely user-friendly program that's been a good friend to me since it was released a couple

Here's one I drew earlier in DA's Picture...



of years ago. There's not much you can't do with this one – you can write, you can add graphics, you can produce anything from a letter to a manual.

Papyrus uses the Speedo vector font system but I think I'd rather bring NVDI which offers very fast Speedo font handling as well as speeding up the screen display. I'd also need Address to complement my writing – a simple to use yet powerful address database program that mail-merges into Papyrus very easily.

Design

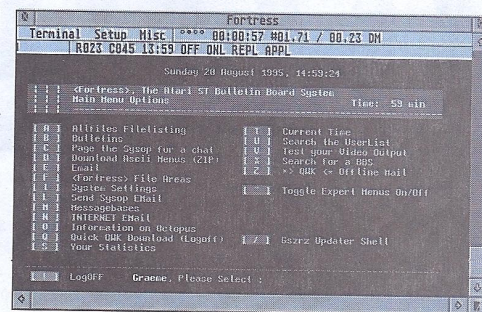
I'm also into design – often working with bitmaps and vectors – so the Digital Art's duo of Picture and Vector would be next on my list. Unfortunately they both boast a slightly non-standard interface which I'm happy to put up with as they also offer unparalleled power. They're ideal for any kind of design work – and like everything else on my island are totally compatible with all kinds of Atari gear.

But creating graphics is only one side of the equation – being able to view, convert and print them is almost as important. For that I'd have to bring Imagecopy 4 which does all the above extremely well. It's also the screen grabber of choice for just about every Atari journalist I know – you can guarantee that 90% of the grabs you can see in this magazine were made with it.

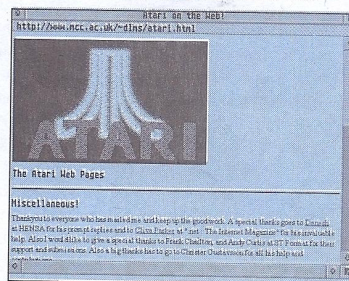
To use my designs I'd need a DTP program and as it's my choice – and money is no option – I'll go for both DA's Layout and Calamus SL. They're both good for different things, you see, and I wouldn't want to be caught short when developing my message in a bottle.

Communications

Next would be a comms terminal, and as readers of my column will know I think that Connect is the dog's danglies. It's a wonderful program written with the user in mind and rock-steady in any multitasking environment. The emulation modes cover everything I've ever needed and unlike some



Here I am "Connect"ed to the Fortress BBS.



The Crystal Atari Browser in action on the Web.

terminals work perfectly every time in whatever screen res you chose.

To get me on the Web I'd also want the Crystal Atari Browser (recently on the *Atari World* Reader's disk). I suppose I'd have to go for Oasis too (apt, huh?) to cover my FTP, email and Usenet news needs. All I'd need then is a good fax program but there isn't one I really like on the Atari. Maybe I'd better have a programming language as well so I could write my own? I just hope this desert island has good quality telecommunications facilities!

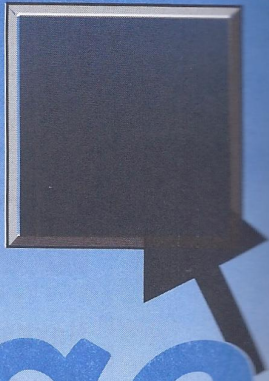
I'd swap it all for another glimpse of Kim though. I might be an Atari lover but there are some things that are more important than computers...

It could be you!

An ISDN equipped desert island? I think not, Graeme! Never mind, *Stranded* is the page that everyone can share – if you'd like to write about the sort of things you'd want on a desert island, all you need to do is turn on your ST and get writing. Send your submissions to me at *Atari World* and we'll be in touch...

Andrew Wright

Never mind the language



Today let's look... through the programming window. Jon Ellis continues his expedition into the world of GEM programming.

We've dealt with two of the main GEM programming basics: the menu and the dialogue box. The third major GEM set-piece is the window. Although the GEM windows system may seem horrendously complicated to start with, it's actually quite logical and easy to program once you've got to grips with the basic ideas and the jargon.

The most fundamental thing about a window is that it is an area of screen which GEM has allocated for an application. The area is operated as a partnership. The program restricts its output to the window, rather than using the whole screen indiscriminately. GEM keeps an eye on the area, and tells the program if anything happens in it – maybe a mouse click or another window overlapping half of it. This cooperation is essential for multitasking: the running of more than one application at once. Windows and multitasking are closely related; a theme taken up in the Background Briefing box.

Border elements

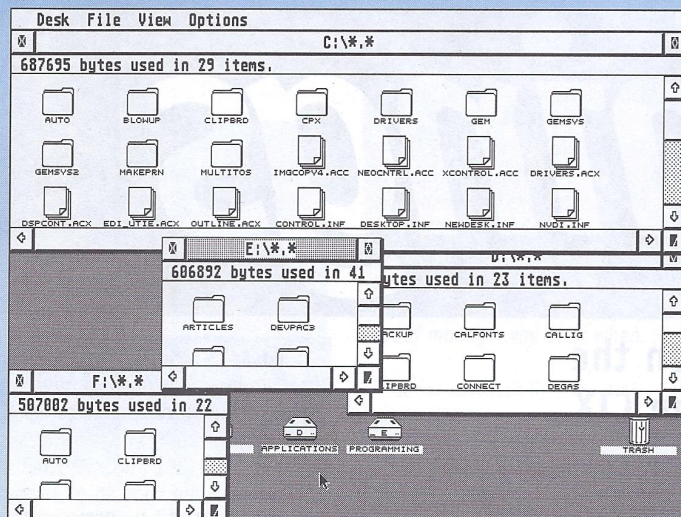
Since one of the common things that programs want to do with their screen space is to use it to display part of a document that is too big to fit on the screen, GEM provides facilities to simplify this process in a window. These are the icons and sliders that allow the user to scroll, move and close the window. See the jargon-buster box for more details.

You don't have to use all of these elements – it's up to you to choose which are appropriate for your particular application. For example, a word-processor may well use all of them to allow navigation around a text file, whereas a simple window displaying the status of a file transfer may just have a mover bar. Some special-purpose windows may actually use none of these widgets: windows containing dialogue boxes often fall into this category.

Enough of the background. Next month's article will feature some practical code for simple window handling.

Background briefing: why it's best to be top

So far we've only dealt with one window in isolation. What happens if there is more than one window on the screen? The answer is that one is designated as the window that the user is manipulating. This is called the *top* window and looks different to the others. The top window has fully drawn in border elements, whereas the others (the *background* windows) just have outlines. The user switches between windows by clicking the mouse anywhere on the window surface. This is called 'topping' the window (nothing to do with gangland killings!).

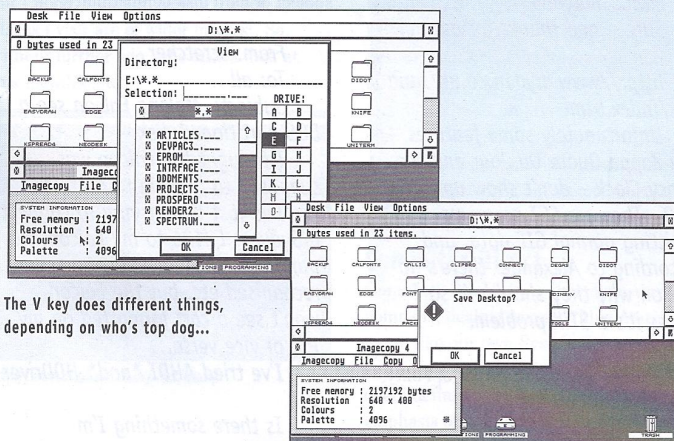


Spot the top window.

At the risk of getting a bit abstract, the idea of the top window is important, because it allows windows to be much more than just areas for displaying data. Imagine a word processor with several windows open on the screen at once, each containing a different document. When you click on a document window which is in the background you tell the word-processor two things. First, and most obviously, you ask it to top the window. Secondly though, you are implying that you want to switch to work on another document.

Simple enough. Now imagine that you have several windows on the screen, each belonging to different programs. Now when you top an inactive window, you are changing programs, or *task-switching* to use the jargon. This is exactly how GEM's multitasking works: what the operating system does is to focus user input (such as keypresses) and processing time on the program that owns the top window. You change top windows, you change programs.

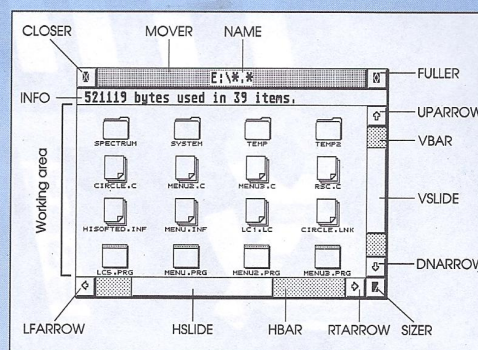
Even without MultiTOS you can demonstrate this using a desk accessory, preferably one like Imagecopy that understands keyboard input. Activate the accessory and then press one of its keyboard short-cuts. It should respond in the appropriate way, maybe by displaying a dialogue box. Now try the same experiment, but before using the keyboard, top one of the desktop windows. Now the keypress should either do nothing, or actually activate a desktop dialogue, depending on what the keys were.



The V key does different things, depending on who's top dog...

Jargon buster: window anatomy

One of the more confusing aspects of playing with windows is the array of icons and boxes that populate the edges of most windows. Here's a brief reminder of their names and functions:



CLOSER – click here to close the window

MOVER – click and drag here to move the window

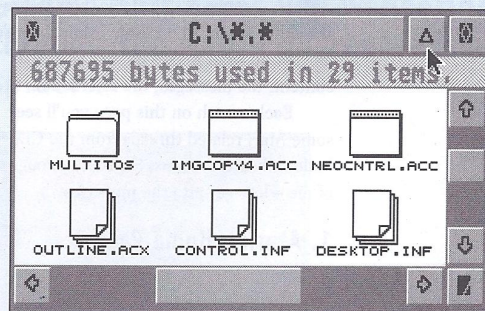
NAME – a text string – usually the name of the window

FULLER – click here to toggle the window size between full screen and normal size.

INFO – a line of text, usually used for status reports etc

UPARROW, DNARROW, VBAR, VSLIDE – these elements operate together to control vertical scrolling of the window. The size of the VSLIDE in relation to the VBAR indicates what proportion of the document is visible in the window. The VSLIDE can be dragged up and down the VBAR to alter the position of the window within a document. Click on the VBAR above and below the VSLIDE to move the window a page up or down respectively. Click on the UPARROW and DNARROW icons to move single lines in each direction.

LFWARROW, RTARROW, HBAR, HSLIDE – these control horizontal scrolling of the window in exactly the same way as the vertical scrollbar elements above. The working area is the area of usable space inside window, excluding the border elements. The full area is the total area of screen space taken up by the window. The latest (unreleased) versions of MultiTOS also included extra window widgets, like the **SMALLER** icon and toolbars. However, unless and until there's a release version of the operating system that includes these, they will remain just curiosities.



Click on the SMALLER gadget to turn windows into icons.

Threads & Things

Graeme Rutt focuses on the Atari message bases on CIX.



Hoagy's home page, on CIX.

For the past year or so in Atari World I've focused on the mechanics of comms – what software's available, how to use it and so on. Now I thought we'd move onto what makes comms tick: the content, the messages, the interaction.

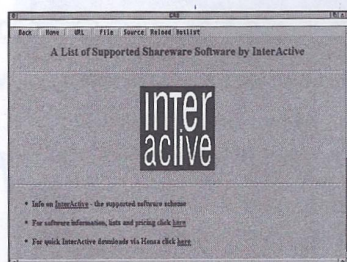
Each month on this page you'll see some Atari related threads from the CIX bulletin board systems. So, that's enough of me – let's get into the messages...

1. Atarian Home Pages

This message thread was opened up by Hoagy himself...

From: hoagy
Anyone out there have web pages they want to tell us about? How about a www topic, Messrs Mod?

The two I know about at the moment are mine and Ofir's,
<http://www.compulink.co.uk/~ktl/hoagy.html>
<http://www.compulink.co.uk/~gal/>
Anyone add to this list?



And Joe Connor's embryonic Interactive pages...

Joe Connor (yes, that one) replied

From: jconnor
InterActive pages are (slowly) under construction at:
<http://www.cms.dmu.ac.uk/~c4sy/interactive/>

Quickly followed up by Martyn Dryden...

From: mdryden
Sure – and thanks for asking!
:) <http://www.dryden.co.uk/sandbox/index.html>

Unfortunately some features – the Zappa Quote Du Jour and the Fancy Clock – don't show up in CAB. They are CGI programs emitting normal GIF data, and according to Alexander there's no reason why they shouldn't, so I guess it's a STiK problem.

Matthew Carey, the author of Fonty, chipped in with his site...

From: mcareyb
I think you've been to mine.
<http://www.compulink.co.uk/~peckham/>

... and finally Gordon Williams added his to the growing list.

From: gwilliamsh
My humble effort may or may not be available on:
<http://www.compulink.co.uk/~bicesterh3/>
I say "may or may not" because my STiK/CAB is resisting all my efforts to work ATM. It worked for a while and then stopped.

I'll be coming back to this thread in future as more Atarian's come forward with their home sites.

2. Atari and PC hard disk compatibility

Scratcher brought up the thorny subject of hard disk compatibility:

From: scratcher
To: all
Subject: Making Falcon see a DOS partitioned disk
I thought the Falcon was supposed to be able to do this?
I've just been trying to connect a Syquest EZ135 to my Falcon. No problems getting the drive recognised etc. but the Falcon won't see a cart formatted on my PC, or vice versa...
I've tried AHDI *and* HDDriver B-(
Is there something I'm missing?

It was answered by, well, me...

From: sabbath
Are you using partitions under 32MBs?

The alternative is (with HD Driver) to use Bigdos, this should let you read larger DOS partitions. Bigdos should have been in your soft folder on the HD Driver 4.5 disk.

...and my answer was later qualified by Robin:

From: robinb

That much is the good news. The less good news is that it does a few things to boot sectors to make them more compatible. Ataris generally skip some of the less important fields like the "media descriptor" byte, so fixing them up should be for the better. However I found a more worrying problem that BigDOS was causing my my boot partition FAT1 to be different to FAT2 (Falcon's IDE). FAT2 seemed to be good but FAT1 was not (v. scary)

Anyone else had this problem? I've reported it to the author - no reply yet.

I should mention here that the compatibility question is true for all Ataris, not just Falcons, and that Bigdos is available in the public domain.

3. Extended keyboard characters

This thread was started by Colin Watson and includes important information for any word-processor users...

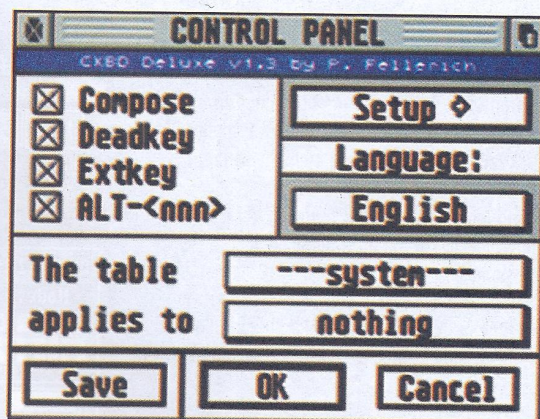
From: cwatsonb
To: all
Subject: Extended character set

Does anyone know how, if indeed it is possible, to access the extended ascii character set in Atari Works? Obviously the manual doesn't mention it; that would be stupid ;-!, but this is a trick that even the humble Microsoft Write could manage way back when.

It was answered by Chris Ridd...

From: chrisridd
Use CKBD from 2listings: it will give you deadkeys so you can type ' followed by e and get é. There are other deadkeys too, and CKBD has a good mouse accelerator.

...and he's quite right, I had a go with it myself. CKBD.PRГ works with just about any word processor (or text editor) and is available in the public domain.



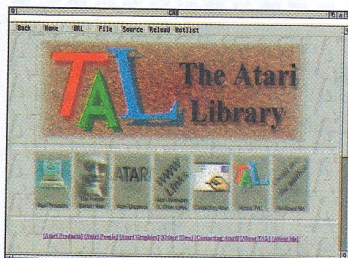
The CKBD control panel...

Join CIX for free!

To tie in with the start of this series we've arranged a very special offer for those of you who'd like to join the vibrant Atari community on CIX. Simply dial 0181 296 1255, with your modem, type 'CIX', followed by 'NEW' and go through the signing on procedure. When asked if you have a special code, type 'Y', followed by 'ATARIWORLD'. And there you go - the £25 signing on fee is waived!

Web-wise

Another new series this, a section devoted to the World Wide Web and specifically the sites that you can enjoy from the comfort of your Atari. The emphasis will be on Atari related sites but I hope you'll forgive me if a few of the places I visit are of wider interest. So, without further ado, let's take a look at this month's sites.



<http://www.cs.bham.ac.uk/~lks/atari/>

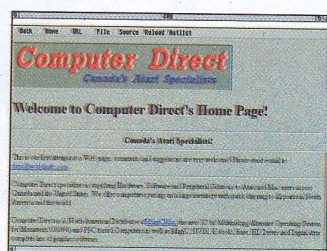
TAL - The Atari Library

The Atari Library was a pretty good find, a site devoted to fairly static Atari information and resources. It's a beautifully presented site, as you can see from the front page, featuring (not too) nested menus that get you to the juicy information. There are fairly detailed technical sheets on just about every Atari machine ever made, a page for various Atari employees (past and present) and a page for Atari logos and other interesting graphics.

Computer Direct

Computer Direct are a Canadian Atari company, dealing in everything Atari, much like our own System Solutions. The presentation of the site is a little bare and could definitely be better - but at least the emphasis on text makes it fast to access. The biggest section of this site is the on-

Graeme Rutt takes you wandering through the web - guaranteed, no spiders.



<http://www.compdirect.com/>

line catalogue - I love browsing these things looking for items that we just don't have in the UK. Did you know, for example, that Computer Direct produce their own TT-clone that runs 500% faster than the real thing whilst costing less?

Have You Got A Site?

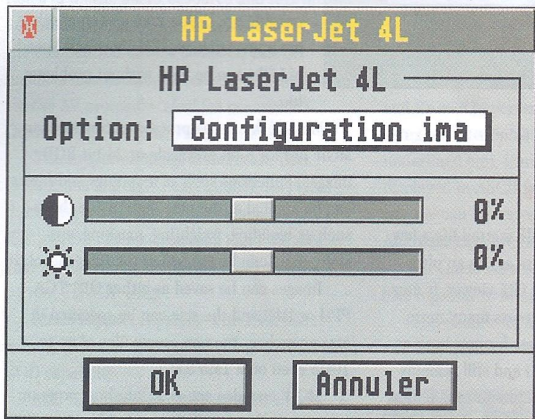
Do you have a site you'd like me to feature on this page? It doesn't have to be Atari related (although that's a plus) - maybe you created it using your Atari or you just think it's a great site. You can get in touch with me via:
sabbath@cix.computink.co.uk.

Making music has never been so affordable!

<http://exxos.www.idnet.com/IMPULSE/atari/last/>

Public Arena

NEWS



This neat Control CPX was included for the Laserjet.

Craig Graham of Data Uncertain Software is close to releasing a non-commercial alternative to MultiTOS called XaAES (XaAES ain't AES in case you're wondering). XaAES is a complete replacement for MultiTOS which installs the MiNT kernel, the Minix file system, network drivers and ancillary files needed to create a complete pre-emptive multitasking operating system replacement capable of multitasking GEM programs. Craig claims XaAES is ten times faster than AES 4.1 and doesn't noticeably slow down even when running ten GEM programs on a 32MHz Falcon with 4Mb memory!

There's a new collection of SpeedoGDOS drivers for most of today's popular printers. The only snag is the documentation and install utilities are French. I tested the HP Laserjet driver which updated the ASSIGN.SYS, added the driver to my GEMSYS folder, a control CPX to my CPX folder then invited me to reboot so do be careful to make a backup of your existing setup before running the install program! Drivers for the following models are available: Canon BJ 30, 200, BJC 4000 and LBP 8 IV, Epson Generic LQ 24pin, Stylus 800, 800+, 820, Color, Color II, Color IIs, Color Pro, Color Pro XL, Hewlett Packard 500C, 510, 550C, 660C, Laserjet 4L and 4P, Panasonic KXP 4000, Texas MicroWriter and MIDfile sound driver.

Who's who

Wondering about the initials after each review? JC, of course, stands for Joe "King" Connor. DB is his sidekick, Denesh Bhabuta (also known as Denesh the Menesh for his poor deadline-keeping). CL is our Swedish correspondent Carl Löfgren. I was going to insult him too but as he lives up in the Arctic somewhere he's probably only thinking about staying warm just now. Maybe next month.



Woolly animals?

The plethora of file viewers doing the rounds has re-affirmed my suspicion that software is programmed by woolly animals. Long standing Atarians must have yawned along with me through the age of disk formatters, RAM disks, and printer spoolers into this latest craze.

What strikes me as odd is that despite over ten years of collective programming effort there's only a couple of decent RAM disks and disk formatters which run across all models!

If a handful of the programmers working on file viewers turned their attention to programming the definitive application for each section of a PD/shareware catalogue the future for the TOS platform would be assured. We need a steady stream of software which is constantly updated to take advantage of the latest protocols and hardware available. The old favourites are on their last legs and we urgently need fresh blood!

I'd also like to encourage any programmers who no longer actively update their software to release the source code for the benefit of fellow Atarians who seem dedicated to re-inventing the wheel at every opportunity!

Joe Connor

jconnor@cix.compulink.co.uk

DBA Issue 14 Disk magazine

Falcon only



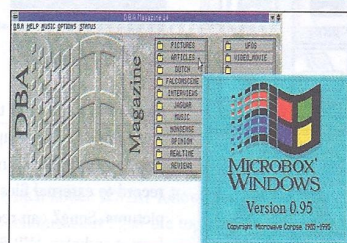
The Dutch-based Disk Busters Association have been producing Atari STe-based disk magazines since 1991 but this is the debut issue for the Falcon

featuring their new 'Microbox Windows' shell which offers a stunning front end Atarians can enjoy at the expense of PC owners!

Installation involves manually copying the contents of two high density disks into a folder on your hard disk, running an install utility and rebooting with a minimum system. The main magazine and intro are separate programs and another reboot is required before launching the main mag!

After this shaky start you'll arrive at the main screen with over 3Mb of throbbing multimedia experience to enjoy!

With over 70 articles to read the four seemingly endless sound modules provide the



If this looks familiar
you've been reading the
wrong magazines!



music but if you're not into techno or ambient music you'll have to source your own.

The text viewer includes mouse or keyboard control and a choice of four fonts displayed over tasteful and readable backgrounds, this viewer screams quality - it's smoooooth!

The mag isn't a self serving ego trip for the coders or even a tribute to the Atari platform it's simply a darn good read which happens to require a Falcon. There's plenty of Atari related coverage including an overview of the Atari demo and coding scene, including interviews with the Lazer team (who coded the intro), input from the Maggie team and a few Jag reviews but the main thrust of the mag is mainstream so you'll still need a copy of Atari World!

If you're into Star Trek, Babylon 5, UFOs, film, TV, music, poetry or learning Dutch (who isn't?) grab a copy and a Falcon to run it on - neither will disappoint!

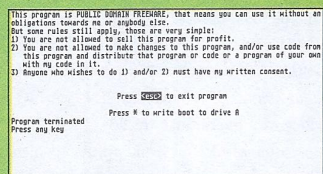
JC



SNIPPETS

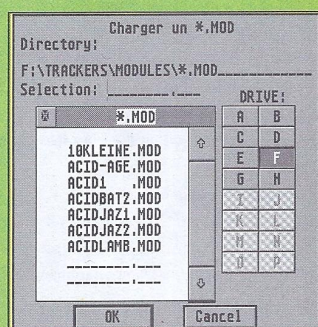
FastBoot v0.5b

If you're a Falcon owner without an internal IDE hard drive FastBoot can be used to speed up your boot sequence. Falcon Boot is a small TOS program which create an executable boot sector on your boot floppy disk. Booting with this floppy bypasses the memory test and internal IDE boot sequence arriving at your desktop in only a few seconds. JC



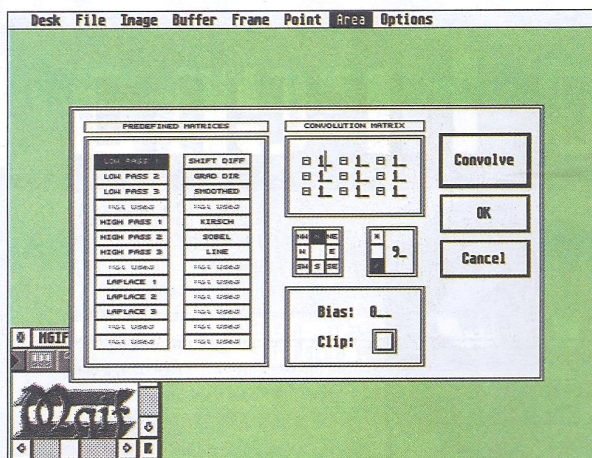
VibraX

VibraX is a Falcon only desktop accessory module player. There's no interface or options and due to its DSP playback routines the mouse sometimes disappears, the keyboard hangs, and starting another DSP application crashes the system – apart from that it works! CL



Spekralizer

From the creators of WinRec and Five to Five comes Spektralizer, a little utility which produces a 13 band frequency spectrum, from the input of the Falcon's microphone input. It isn't as comprehensive or usable as Music Analyzer (reviewed in AW10) but it does give you a rough view what's going on. CL



Convolution is one of the many image processing functions MGIF has to offer.

MGIF v5.00

Freeware • All Ataris



MGIF started life a few years ago as an ultra fast GIF viewer. It now supports many more image formats such as JPG, TGA, PPM and (X)IMG and still remains the fastest GIF viewer available running under GEM. MGIF has also evolved into a powerful image processing package second to none in the PD sector.

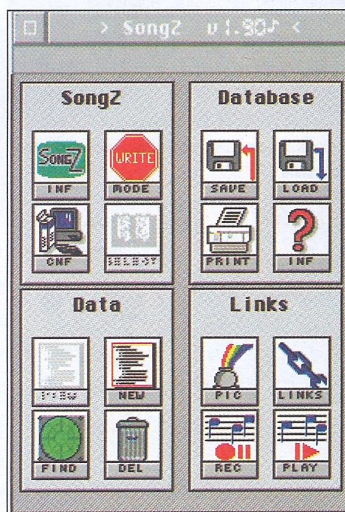
It displays images in any resolution including those by screen enhancers such as BlowUp or graphics cards using the VDI. Supporting 24-bit colour it displays images in 16 or 256 colour modes with excellent results. If you display a colour file in high resolution mono then MGIF uses a flicker mode giving four pseudo greyscales. Images are automatically dithered according to the machine it is running on. Dither matrices from other programs such as GEM-View and Speed of Light can be used without problems too.

Most of the image processing functions in MGIF are for 8-bit greyscale or 24-bit RGB images. Functions such as mappings and filters can be applied at the pixel level while those such as blending, weighting, masking, and sharpening can be applied at the image level.

Images can be saved as either GIF, TGA, PPM or IMG and the size can be specified in cms or inches. You can create files of up to 10Mb even on a 1Mb ST!

MGIF can also act as a slideshow program being run off a script or choosing files in random. So if you are a graphics junkie give MGIF a try.

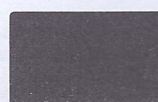
DB



SongZ is a brilliant database featuring an excellent interface

SongZ v1.9.0

Shareware • All Ataris



SongZ is a relational multimedia database which works on all TOS compatible machines with at least 1Mb memory. You can use it to store information about your music collection: author, title, year of production, music style, length, media and number of tracks.

What sets SongZ apart from the others is the links option. This lets you have links from one record to numerous others. You may even link a record to external files such as guitar tablature files, sound samples and pictures. SongZ can record sound samples direct to disk in its own format and play AVR files and many graphics formats are covered. External viewers can be specified if SongZ can not play a certain sound format or display a particular graphic file such as QuickTime or MPEG. It is even intelligent enough to set the corresponding attributes when adding a link to an external file!

SongZ comes complete with a slick user interface. Colour icons abound, even on a bog standard ST. Non-modal dialogues, popups, and menus all contribute to a fast and friendly working environment. A password can be set if you want to protect your database from prying eyes. The program even runs in the appropriate language (English, French or German) by detecting the language of the machine it is running on.

SongZ has been around for a while now and this latest release really tramples over the competition. If you want to shape up your music collection then take a look at this.

DB



1st Guide 01/96

Shareware • All Ataris



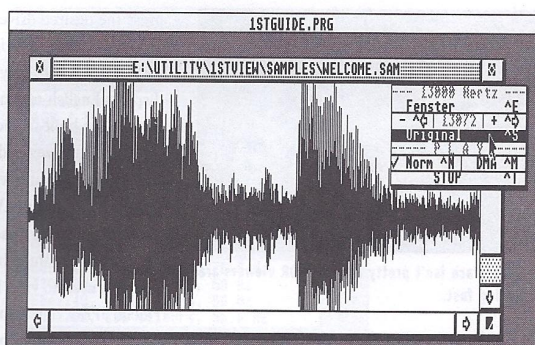
There are plenty of Falcon only file viewers around but the choice of decent viewers

for owners of other Atari models isn't nearly so wide. 1st-Guide has an excellent pedigree stretching back to the eighties and this recent release consolidates its support for a wide range of image, audio, resource and text files. 1st-Guide isn't as comprehensive as some of the competition but it's compact, can be installed as a desktop accessory, and accessed via the AV protocol – ideal for use with ST-Guide, CAB, Freedom, Thing/Gemini etc.

The supported image formats are IMG (with XIMG and TIMG extensions), IFF, GEM (including Bezier curves -if available), JPEG/MPEG (24-bit TrueColor) and the new PNG format which should gradually take over current TIF/GIF usage.

Audio support is patchy with AVR (8-bit mono), SAM and SND included but no WAV or MOD capability.

RSC files, including files with 3D which cross the 64Kb boundary, 3D effects but with



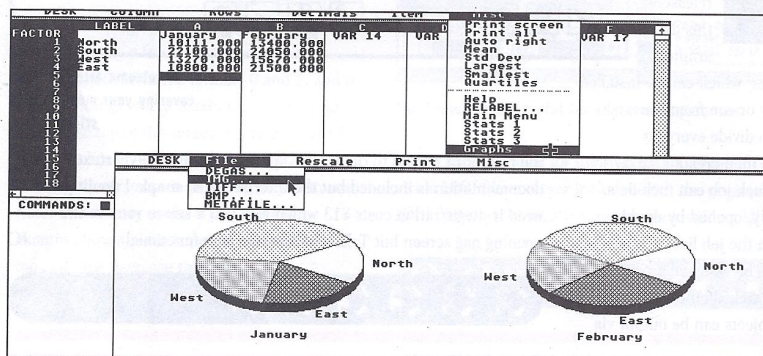
Here's a SAM format sound file, a right mouse click displays the options.

Atari colour icons.

Text files in 1st Wordplus DOC format and its own hypertext files are displayed using text attributes (bold, italics, underlined etc). Unrecognised filetypes are displayed in ASCII format and a hex dump of any file can be viewed if the Control and Alternate keys are held down.

1st Guide runs on any Atari and includes the added ability to link files together to form a hypertext.

The Shareware fee is £20 which includes a disk full of MPEG, JPEG and IMG utilities.



Graphs can be output in a variety of popular formats.

B/STAT v2.48

Shareware • All Ataris • 1Mb memory minimum



B/STAT is a spreadsheet application with integrated graphical and

statistical analysis functions. The Import/Export options are comprehensive which means there's a good chance of swapping files between home and office machines. The supported file formats include Data Interchange Format (DIF), Excel, Multiplan (SYLK), Lotus 123, Comma Separated Variables (CSV) and good ol' ASCII.

B/STAT uses GEM drop down menus but otherwise uses it's own interface which makes

the interface unnecessarily crude. If you're familiar with spreadsheets you'll notice B/STAT follows convention with cells displayed in rows and columns starting at the top left hand corner with A1, the active cell highlighted and a command line along the bottom of the screen, all standard stuff.

After entering the data it's time to switch to either the graphing or statistical analysis menus and this is where B/STAT really excels (no pun intended). Of the 26 graph styles available I'd heard of some of them but a quick glance at the statistical analysis section confirmed I out of my depth so if correlation, ordinal, nominal, -t, variance and normality(!) tests or descriptive statistics, distributions, anova, regression and time series, mean anything to you they're all in and you're welcome to them!

Registration costs \$40 Canadian dollars (Postal Orders made out in Canadian dollars are readily available from UK Post offices) which gets you the latest version along with a 140 page printed manual of which over half is devoted to a tutorial on statistics. With a better interface this otherwise sophisticated package would be an Atari World beater.

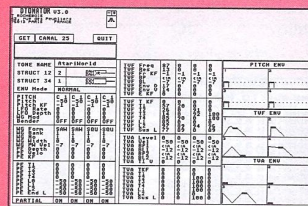
JC



Dtonator v3.0

French Dtonator is an extremely small and compact patch editor for the Roland D5, D10, D20 and D110 range of synthesisers. It doesn't include a librarian or any other fancy utilities. However, as it's only 40Kb big, it only takes a few seconds to load which makes it handy to have around for the occasional edit.

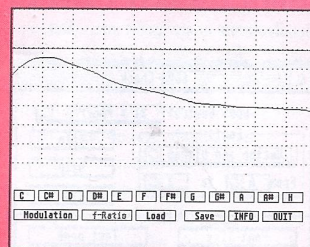
CL



FM-Synthi

This odd little application turns a Falcon into a FM synthesis emulator. New sounds are created by drawing on screen. FM-Synthi isn't of much use as it can't save the sound to disk but is amusing to play around with.

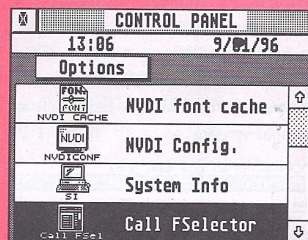
CL



Call FSEL v1.1

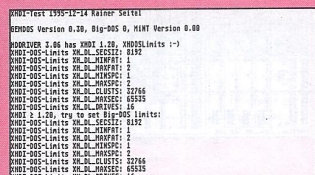
Call File Selector is a freeware CPX module programmed by Mark Baines which can call the file selector from within any program which allows access to the GEM menu bar and Control panel. CFSEL is compatible with all popular OS and file selectors including Selectric and Freedom.

JC



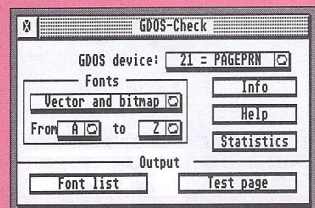
Big-DOS 6

Big-DOS is a freeware ISO 9293 compatible replacement file system which makes it possible to create and access MS-DOS compatible partitions on your Atari. With the popularity of Zip and EZ SyQuest removable media there's a growing demand for compatibility. If you need access to larger than 32Mb partitions you'll have to tinker with drivers and test for XHDI compatibility using the included utility. **JC**



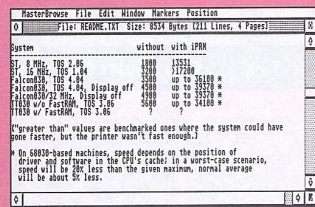
GDOS-Check v2.06

GDOS-Check, programmed by the IdeaList author, is useful for testing your GDOS installation. A test page can be created which shows the maximum printable area for your printer. In addition GDOS-Check can create font lists for all installed fonts at any point size. **DB**



iPRN v0.46

iPRN the excellent printer accelerator has just been updated. In addition to speeding up printing it includes printer status tracking, instantly informing you if the printer is off-line instead of you having to wait for 40 seconds to find out. This update fixes a few bugs in the MFP routines giving slightly faster output. Registration entitles you to version 2.00 which includes direct GEMDOS support and an up to five-fold speed increase from previous versions. **DB**



The interface isn't pretty but the KOR viewers are lightning fast.

Alpha v1.2

Various • Falcon only



Alpha is a TOS shell hard wired to launch other TOS/TTP utilities to play samples and view images.

The non GEM interface is easy to use, simply

press the desired drive letter to change drives, the arrow keys to move around the files, the Undo key to display info about the selected file and the Return key to play a sample or view an image. The Help button displays English on-line help and details the other active keys used to control the built-in slideshow, zoom and pan tools.

Alpha is developed by KOR, a member of the French Trisomic Development group, who programmed the excellent built-in Targa (TGA) viewer and external AVR and FLI utilities. Other utilities programmed by various authors are used for everything else. MOD files call Protracker Replay, programmed by Martin Griffiths, and his shareware PlayMPEG utility is used to view MPEG files. JPEG files are displayed using the Falcon JPEG viewer, programmed by D.R. Oldcorn and the Shower viewer, programmed by Blade of New Core in Sweden, supports a dozen or so common image formats including Degas, IMG and GIF.

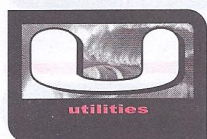
Despite calling all these external utilities there's still a few gaping holes with no PCX or TIF and only partial BMP implementation. Alpha would appeal to a much wider audience if users could install their preferred viewers, especially in the UK where the Apex viewers dominate.

The fast interface and slideshow features make file browsing a joy but the non GEM interface and lack of customisation options means Alpha is a take it or leave it solution. **JC**



ToDo v1.01

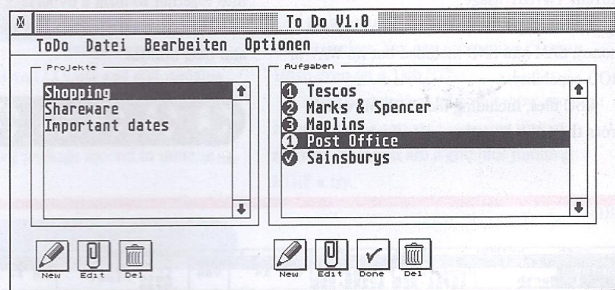
Shareware • All Ataris • ST high minimum



This is the first English release of this disarmingly

simple 'project manager' which can be installed as a desktop accessory or run from the desktop. The idea is to divide everyday activities into projects then create a 'to do' job list for each project. Each job can include a corresponding log entry, opened by double clicking on an entry in the job list.

Each log entry can be assigned a priority from one to three and ticked off the list or deleted as desired. Projects can be output via



A welcome alternative to covering your monitor with sticky paper!

the printer or copied to the GEM Clipboard. ST-Guide hypertext documentation is included but the interface is so simple I doubt you'll need it. Registration costs £13 which gets you a key to remove the opening nag screen but ToDo is otherwise fully functional. **JC**



GEM Spooler v4.0 Beta

Shareware • All Ataris



Printer spoolers allow work to continue during printing. There are plenty of spoolers around

but apart from GEM Spooler they all store the printer queue in memory which is fast but vulnerable to a system crash. GEM Spooler stores the printer queue on disk - which is much cheaper than adding memory!

Installation is fiddly with an Auto folder program, desktop accessory and configuration files to rename and copy to the correct locations - a install utility would be a useful addition.

In use GEM Spooler works well, the printer queue is managed using the desktop accessory



After adding files to the queue you can carry on working normally.

to which files can be added, deleted, re-ordered, assigned a priority, sent to specific ports, passed via character 'filters' etc. Spooled output can even be replayed on another computer equipped with a suitable printer. This beta release asks users for feedback and should be used in conjunction with the current UK v3.3 release which includes ST-Guide hypertext and ASCII documentation. Registration costs £13 for a key to remove a nag screen and 200Kb file limit.

JC



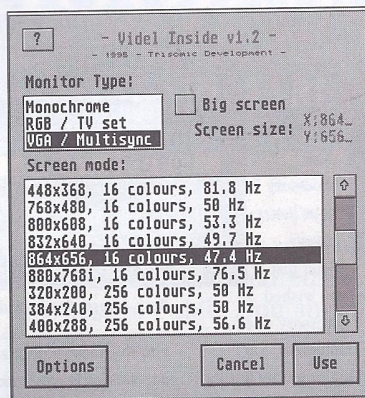
Videl Inside v1.2

Freeware • Falcon only



If you've been jealous of the higher Falcon resolutions attainable using the commercial ScreenBlaster or BlowUp030 screen expanders then Videl Inside gives you an insight to exactly what you're missing. Videl Inside is a software only screen expander written by French programmer François Galea - and best of all it works on ALL monitors, VGA, RGB, monochrome and TVs!

A virtual screen manager allows you to define any resolution limited only by the size of your memory. The visible area on screen is then a window onto the larger desktop area which can be panned around to view everything. Videl Inside isn't as comprehensive



Expand your desktop horizons with Videl Inside.

as any of the commercial expanders but then again it's freeware and highly recommended for anyone using a Falcon without a screen expander - check it out!

CL



The Piano Player

Fairware • All Ataris

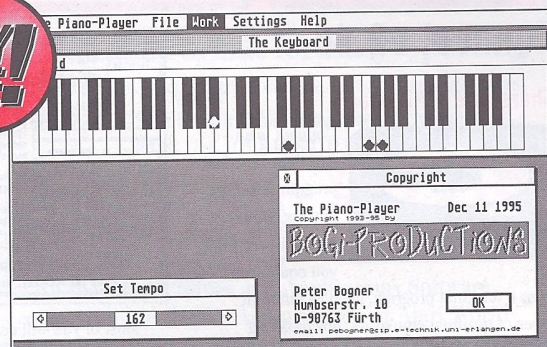


From the programmer of the SMF Player comes the Piano Player, a new MIDI file player.

It's mainly designed for playing 'light' MIDI files, with only a few tracks. However, it supports both MIDI file formats 0 and 1, and it can play songs with a maximum of 32 tracks.

At the top of the screen, there is a 61-note piano keyboard. When you play back a file, you see exactly what notes are being played in real time. This is very useful if you want to examine how a piece is performed: if it's going too fast, just decrease the tempo.

The program is completely non-modal



The Piano Player - useful for educational purposes.

which makes it ideal for use under a multitasking environment. There's also a MIDI file analyser included with the program. It can both play MIDI files and list all MIDI information inside a MIDI file.

CL



ST Muse v1.0

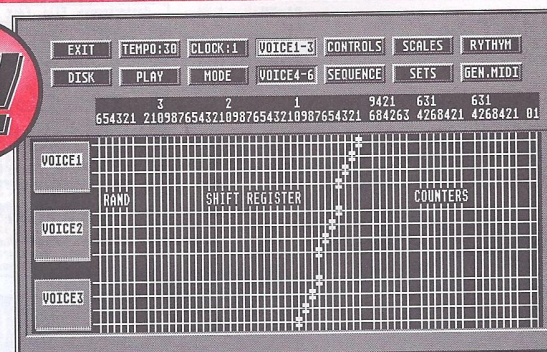
Shareware • All Ataris



From the programmer of Schoenberg and Picture Music comes ST-Muse,

an algorithmic MIDI composition tool, which is based on mathematical sequences and simple digital logic. It allows you to compose complex arpeggios and melodies on three MIDI channels simultaneously, with different settings for each channel.

ST Muse is a competent composition tool, and with some time and patience you can achieve some very nice results with it (try listening to the demo songs, and you'll understand what I mean!). However, it's also a very complex program and is not that easy to



ST Muse is a powerful but complex composition tool.

use and understand. Fortunately there is a tutorial section in the manual, which guides you through the most significant functions.

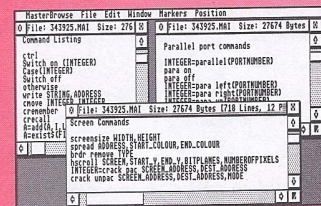
The full version costs only \$5 to register, and it supports standard MIDI files, up to six active MIDI channels, more scales, GS/GM settings plus a whole lot more. If you got a MIDI synthesiser, this one is well worth a look.

CL



STOS Control Extension v3.5a

STOS may be powerful and easy to learn but it is very unstructured when compared to languages like C and GFA basic. This extension adds a switch construct to STOS which makes program listings shorter and more readable as well as many other useful commands. DB



The CyberSTrider Files

I am still overwhelmed by the arrival of STiK, the TCP/IP program for the Atari. Hardly a day goes by without me coming across some news or other about an application being developed for it. Along with STiK came an IRC client. Then there was CAB, the first Web browser for the Atari. Then we hear about a mail program, Antmail, a FTP client DUFTP and a telnet client being developed. A weather forecaster using STiK, Forecast is already available! So what can we look forward to next?

AntMail development is continuing very well and is now MagiC compatible. The author Dan Ackerman is also developing SMTP Server, a mail server to be used on the Atari. More news on that when I get it.

MintNet users can also reap the benefits of CAB on-line. Australian programmer Andrew 'Dancer' Vesperman has programmed a CAB.OVL file to be used with MintNet with a newer and more stable version promised in a few days. Dancer is also working on a new overlay which will allow you to use CAB to access the Web via any normal UNIX shell account. This will be accompanied by a set of install disks making the process a whole lot easier. I can't wait!

CAB itself is constantly being developed. Latest beta allows for printing HTML pages, and Alexander is working on downloading files via CAB.

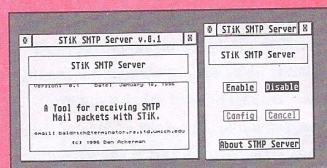
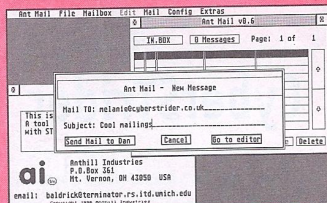
Moving on to the other side of the world, Swedish author of MGIF, Johan Klockars is working on an Internet project to create a free DOOM compatible game

The CyberSTRider Files

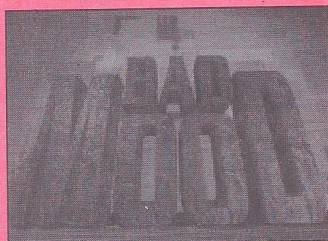
for the Falcon. The latest alpha version includes texture mapping of all walls, floors and ceilings. Only two textures are currently used but this will improve with future versions. You can load in any DOOM, DOOM2 or Heretic WAD file and roam around the scenes. The frame rate is impressive to say the least. Watch this space for more info.

Denesh Bhabuta

dbhabuta@cix.compulink.co.uk



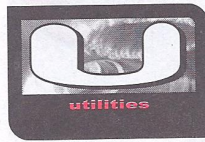
STiK opened up the route to the Internet and networking on Ataris



Doom - will it set gaming standards on the Falcon as it has done on the PC?

Chameleon v1.19

Freeware • All Ataris



The six desk accessory limit has always been just

that. How many times have you wished that you had just one more accessory slot for that ever so vital utility? Chameleon overcomes this nasty GEM limitation by letting you load and remove desk accessories without rebooting your ST.

Chameleon is a desk accessory itself which takes up a negligible amount of memory. You place it in the root directory and reboot. Clicking on it from the desk menu produces a file selector for



Connect v2.46

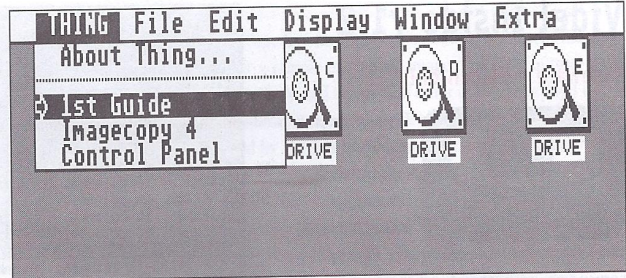
Shareware • All Ataris



Connect is an excellent terminal program for most of your comms needs. Everything you could want

from a terminal program, such as different types of terminal emulation, downloading protocols and more are included in this package.

Connect must be the nicest looking terminal program around, making full use of GEM. The main terminal is displayed in a window with local menus. These and the program wide menus let you adjust the numerous user-definable options to your hearts content.

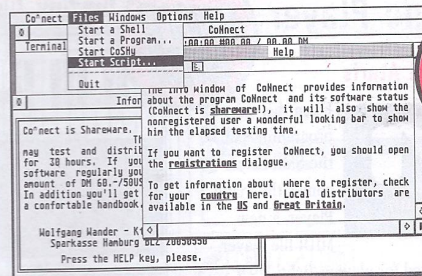


Desk Accessories loaded by Chameleon are shown with an arrow next to them.

you to choose a desk accessory to load. Removing unwanted desk accessories is easy too: hold down Shift and Alternate while clicking on it.

You can even have all six desk accessory slots full of six chameleons and it can also be configured to start a particular desk accessory upon boot up. It is very reliable, working with most desk accessories I have come across. Chameleon is one of those utilities you can't afford to be without.

DB



Connect - A feature packed terminal program.

Most of you will use the Z-Modem transfer option to upload and download files. Connect implements this protocol very well with the ability to transfer files in the background. There is also a very powerful scripting language for automatic tasks.

The unregistered version does not include any English documentation although there is on-line help. Registration costs around £30 via System Solutions.DB



PanTher

Shareware • All Ataris

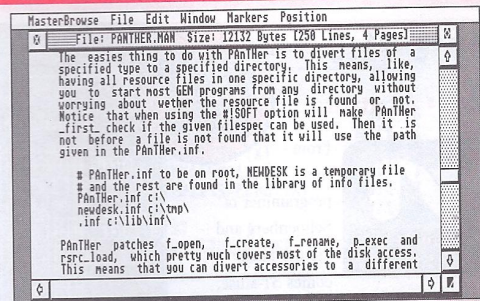


PanTher - A nice program but configuring it is a bit hard to follow.

Hard drive users will be familiar with the scenario of a messy root directory on Drive C. Desk

accessories, various INF, CNF and SYS files end up cluttering this drive. PanTher is a TSR program which promises to clean up your hard drive by putting all the information and configuration files in a single folder, data files in another and so on.

All links are specified by a text editable information file where you could for example tell the system to load all accessories from a folder called DESKACCS on drive C, D or anywhere else. You may even set up save links where files with a certain extension are always



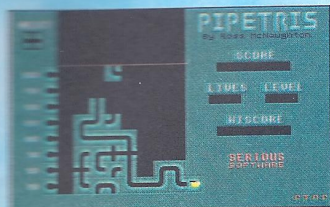
saved in a certain path.

The information file is fully explained in the detailed documentation file, but it would have been nice to have an example included in the distribution. Another niggle in the current version is this INF file can only be placed in the root of drive C so people who boot up in another drive can not make use of this.

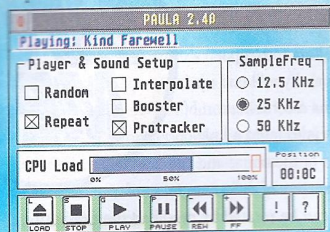
Nevertheless once used you will not want to let it go. Go on... fine-tune your hard drive... call the PanTher.

DB

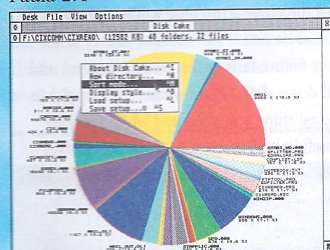




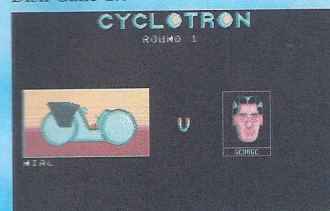
Pipetriz



Paula 2.4



Disk Cake 1.7

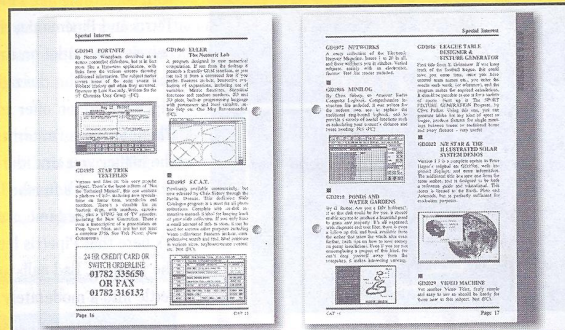


Cyclotron

GOODMAN'S

THE COMPLETE PUBLIC DOMAIN AND SHAREWARE SERVICE

Our catalogue is not a simple ABC list of programs, but is now over **250 pages** of information, with screen shots and descriptions for hundreds of disks of the very best in Public Domain and Shareware.



Loose Leaf Format for Easy Updating

Discover why thousands of users worldwide, have, for over eight years, chosen Goodman's for all their Public Domain and Shareware needs.
SEND FOR YOUR COPY TODAY!

Still only £2.95

All the latest Utilities and Applications Software reviewed in the Public Arena section of Atari World



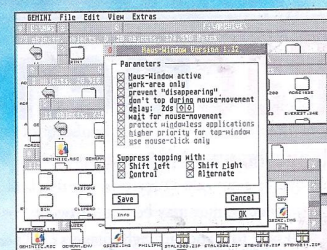
World Conquest



Easy Money



Stoop 1.03



Maus-Window 1.32

A **small sample** of the vast range available - £1.95 each or select 10 for only £14.95

GAMES	EDUCATION	HOME OFFICE	SPECIAL INTEREST
GD2398 PIPETRIS	GD814 FRANGLAIS 1 to 6	GD523 TYPING TUTOR	GD1333 PUNCHER
GD2062 WORLD CONQUEST	GD959 BODY SHOP	GD984 ASSISTANT CHEF 2	GD1381 PHONE VOICE
GD2732 LORDS OF CHIVALRY	GD1029 GCSE MATHS	GD2198 MARCEL WORD PRO	GD1948 ATARI TELETXT
GD2733 ISLE OF GLASS	GD1628 MASTER TIME	GD1357 PHOTOFILE	GD1986 MINI LOG
GD2715 ROLLER COASTER	GD1771 LET'S SPELL INTRO	GD1374 ADDRESS BOOKS	GD2022 SOLAR SYSTEM
GD2713 TRAINSET II	GD1883 WEATHER TIME	GD1521 ALAMANAC	GD2080 ATARI GLOSSARY
GD2712 SPACE MONSTERS	GD1884 PLAYTIME	GD1603 ACCOUNTABILITY	GD2187 FAMILY TREE
GD2662 PARALLAX PAINTER	GD1888 ALEGBRA	GD1925 WORD FINDER	GD2338 BIORHYTHMS
GD2659 H.E.R.O.	GD2248 CLOCKTIME	GD2064 ROUTE FINDER	GD2396 SATELLITE 406
GD2652 OZONE 1 & 2	GD2283 ST GLOBE	GD2254 O.C.R.	GD2610 LOTTERY COMPANION
GD2651 MAGIC DARTS	GD2299 LABORANT PRO	GD2318 GROCERY LISTER	GD2714 ASTRONOMY GUIDE
GD2609 WORLD OF HENRY	GD2542 FUNTIME 1 & 2	GD2477 THE FINANCIER	GD2747 MORSE TUTOR

BLANK DISKS
3.5 DS/DD DISKS

25
FOR ONLY £8.95

WE ALSO STOCK:
MOUSE MATS, DISK
LABELS, JOYSTICK/MOUSE,
EXTENSIONS, DISK BOXES
Phone for details

TEL: 01782 335 650 FAX: 01782 316132

VISA, MASTERCARD & SWITCH CARDS ACCEPTED

OR SEND YOUR ORDER TO
Goodman's

16 Conrad Close, Meir Hay Estate,
Longton, Stoke-on-Trent. ST3 1SW.

ALL PRICES INCLUDE UK CARRIAGE

PROGRAMMERS, FORWARD YOUR PROGRAMS TO GOODMAN'S
AND REACH A WORLD WIDE AUDIENCE OF ATARI USERS.



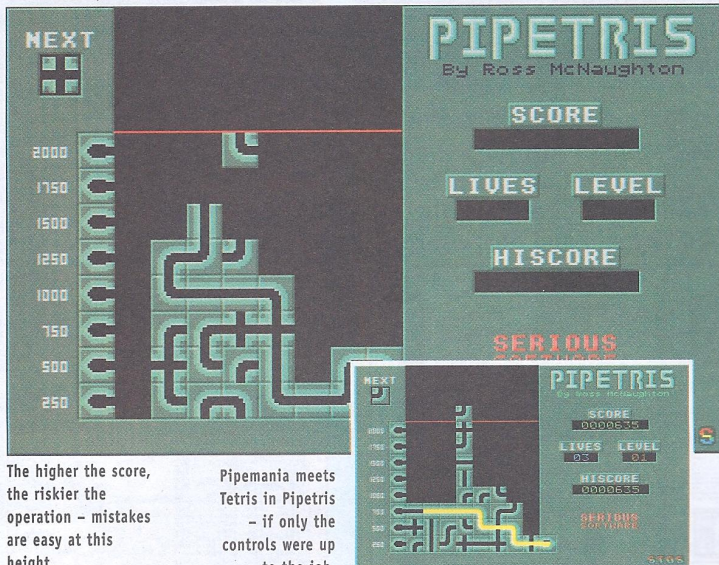
OTHER TITLES

EGO

PLUS
IMPRINT
STORMTRACKER
VIDEO SUPREME 2
THE MONULATOR
TOWERS 1 & 2

AND MANY, MANY MORE

Nial Grimes once again embarks on a journey through PD-land, in search of entertainment...



The higher the score, the riskier the operation – mistakes are easy at this height.

Pipemania meets Tetris in Pipetris – if only the controls were up to the job.

Pipetris

Goodman • £1.95 • Any ST

Take two of the most well-loved puzzle games in history, drop them into a pot marked STOS, stir well and you'll end up with something like Pipetris. As a combination of Tetris and Pipemania, the aim is to build a link between an outlet on the right of the chute and the scoring tubes on the right. A variety of different pieces of pipework are on offer and all can be rotated by prodding the fire button. The juice doesn't start to flow until blocks build above a certain point – the higher you aim, the greater the chance the pipe will be accidentally filled before it's finished.

As a reflex game, success or failure falls to the control system, and it's here that Pipetris lets itself down slightly – movement is sloppy via the joystick. Bad calls are the last thing you need and while you can settle into a moderately successful tapping movement, there's always a lingering frustration at the back of your mind – over and above the hair-tearing level of Tetris and Pipemania, that is.

BUY ME!

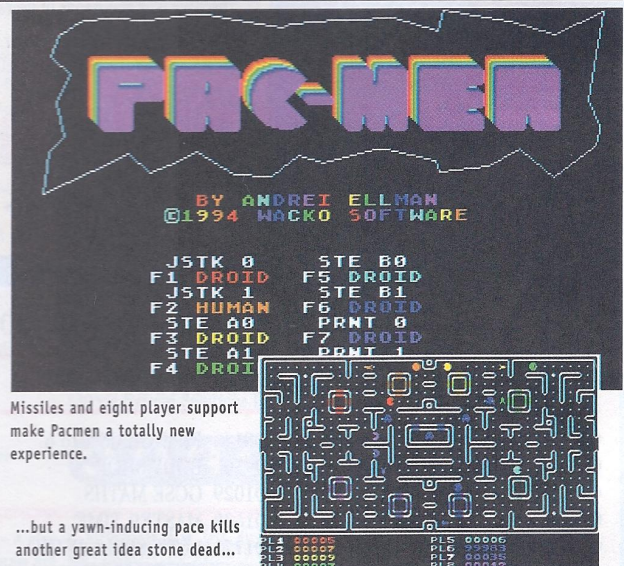
Pacmen

Floppyshop • £2.00 • Any ST

Pacman games may be ten (or twenty, or thirty) a penny, but how many do you know that support eight players? – There is only one and its name is Pacmen.

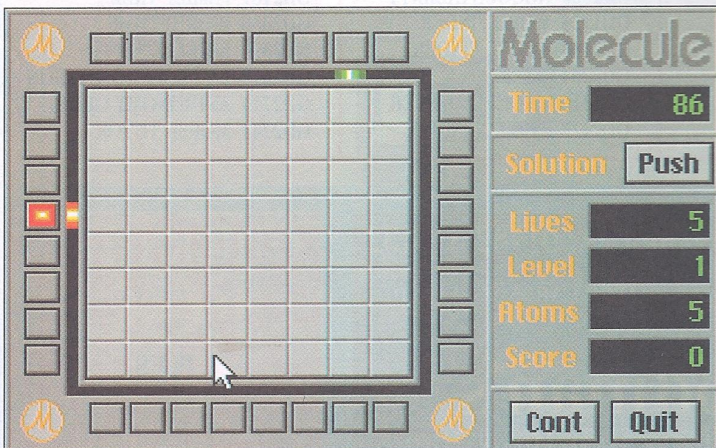
Despite the multi-player pretensions, the gameplay remains relatively unchanged – the aim is to clear the maze of pills, but just to add a bit of spice, each little man is equipped with a controllable cruise missile.

However, a game that could be almost as enjoyable as Dynablasters is rendered virtually unplayable by an abysmally slow pace – “treacle” is the word that springs to mind as you wrestle the joystick backwards and forwards, willing your little player to reach the last few pills. Matters improve slightly if you disable a few players, but not enough to inject an ounce of the playability of the original single-player game. Oh, and you'll also need to be a dab hand with a soldering iron (not to mention a hardened joystick collector) to get all of the players up and running.



Missiles and eight player support make Pacmen a totally new experience.

...but a yawn-inducing pace kills another great idea stone dead...



Use the lasers to find the molecules – believe me, Minesweeper is a piece of cake after this!

Molecule

Floppyshop • £2.00 • Any ST

Molecule serves to show just how easy the ubiquitous PD puzzler Minesweeper really is. Superficially, the gameplay is very similar – you're out to locate a number of atoms hidden in a grid – but instead of little squares that tell you roughly where the targets are, you've got to rely on the elaborate paths of lasers. By comparing the entry and exit points according to the rules set out in the manual (you do not want to know!) you should be able to work out the positioning, only to be faced with another level, and a tighter time limit. The number of molecules is adjustable and if you do lose the game, the exact paths of the laser are displayed, thus aiding you in getting it right next time.

Molecule is a reasonably good looking game that isn't spoiled by the lack of sound effects and music. It's both original and playable, although not instantly so – learning these damn rules takes time. Nevertheless, if you enjoy a challenge it's well worth a double-click...

BUY ME!

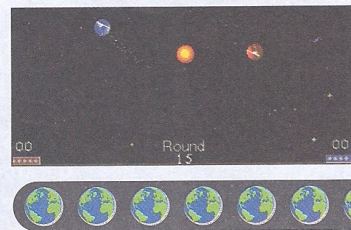
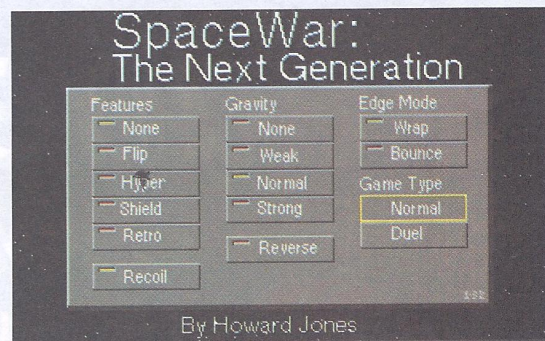
SpaceWar: The Next Generation

Floppyshop • £1.95 • Any ST

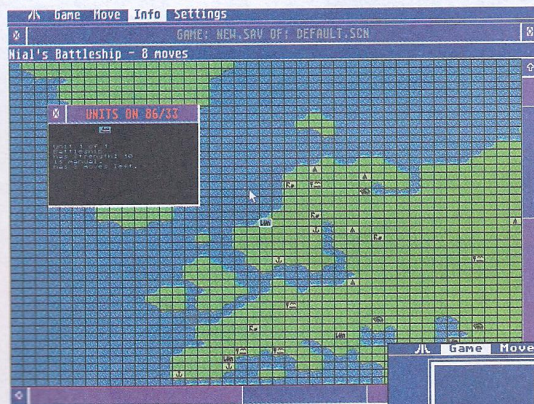
If SpaceWar illustrates one point, it's that a well-implemented game can be fun, no matter how tired the concept. In fact, the original SpaceWar was one of the first computer games ever devised, hitting the PDP-1 at the start of the 1960s, and you'll find the same basic game here: two player-controlled spaceships circle a sun, destruction of the enemy being the only goal. Over and above the sun's gravity and the hyperspace button, this modern-day version boasts shields, retros, reverse gravity and plenty more besides – all can be disabled if you prefer the traditional approach.

The presentation amply backs up the action, with little plumes of energy shooting out of the back of each craft as you hit the accelerator, and that's to say nothing of the shaded graphics and the starfield that inhabits the menu screen. Sure, it doesn't match Speedball for sheer two-player thrills, but the precise controls and slick graphics make this the very best version of SpaceWar available for the ST

Shields and extra gravity effects add to the basic SpaceWar gameplay.

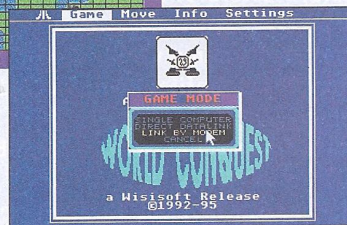


Graphical effects and an accurate control system make SpaceWar playable, despite the age of the concept.



A GEM interface and high resolution Falcon graphics – what more could you want?

Play by modem or drag the ST into a game – the choice is yours.



World Conquest

Goodman • £1.95 • Any ST (Falcon compatible)

Wargaming puts in another appearance on the ST courtesy of World Conquest. Although the gameplay is standard fare, involving cities for production and military units for attacks, it has one or two tricks up its sleeve. For a start, a completely windowed environment is presented on both the ST and Falcon, and you can also opt to play via a direct serial or modem connection. But don't worry if you can't persuade any friends to join you in a game, because the computer is happy to stand in, and a damn fine player it makes too. Play is customarily elaborate, but everything is mouse controlled and you've got the benefit of a great on-disk manual (in English, French and German). Although quite complex, World Conquest is a real class act – combine the beautifully crafted GEM interface – capable of running in almost any screen resolution – with the play-by-modem support and you've got a game that no war-game fanatic should be without. Attack, men!



Cyclotron

Goodman • £1.95 • Any ST

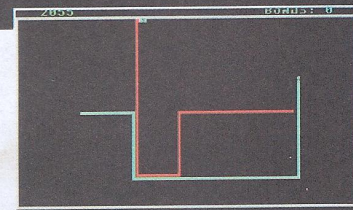
The film itself may have been less than inspirational but one good thing did come out of Tron – a computer game called Light Cycles, and Cyclotron brings the experience to your ST in true style. Guiding your cycle around the arena avoiding walls and enemy light trails may sound easy, but a healthy portion of forward thinking is needed if you are going to see it through more than the first couple of rounds.

Yes, that's right; unlike many of its peers, the game is designed to be played against the computer and you'll face a succession of shady characters in your quest to complete the twenty round tournament. Perhaps even more impressive is the control system – it's the only version I know of that won't allow you to crash into yourself by trying to perform an about turn (a real frustration killer). Maybe it does lack a little something in the longevity stakes, but you'll certainly get your money's worth before boredom strikes.



A single player Light Cycles game at last, and it's even got a sensible control system!

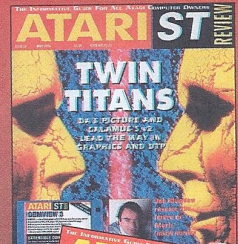
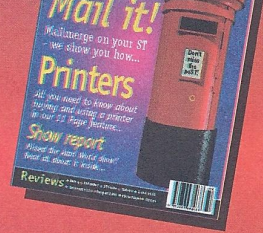
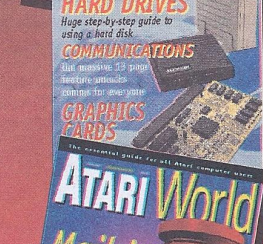
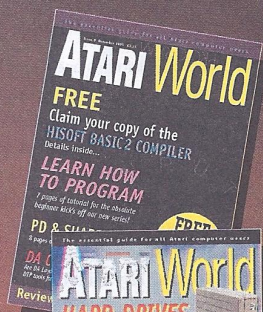
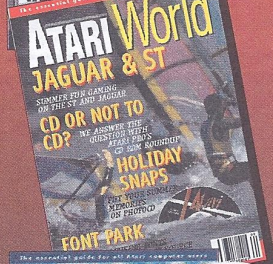
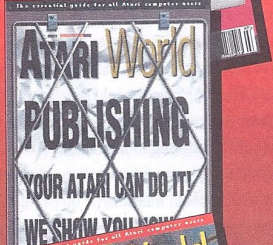
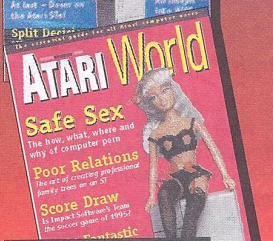
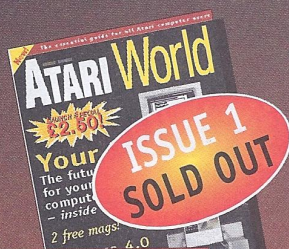
Avoid the trails and the walls and you'll do just fine – just pray your opponent has a peanut for a brain.



Readers Disks

... for your collection

Just for you -
a Reader Disk rundown



- Issue 1 (1Disk) ST-Guide Release 4, ST Guide Creator 4, Darklord v3.1, Pinhead v2.1, PacShell v2.59, Profile v2.08, Turbo Blanker v1.24.
- Issue 2 (2 Disks) Speed of Light v3.8, Bootsie v1.74, World Clock v1.0a, GDOS-Check v2.0, Maus-Window v1.32, Duet v1.0e, Vericard v1.0, Thing v0.31e, Thing Utilities, Atari World Profile.
- Issue 3 (1 Disk) Thought 2 Demo, GD-Flag v1.15, IdeaList v3.6, Fastcopy III, Kivi v1.37a, Atari World Profile.
- Issue 4 (8 Disks!) Address v2.2, AVFM v1.0, LED-Panel v3.1, Mouse23 v2.3, Atari World Profile, Turtle v3.2, Timeworks 2.01.
- Issue 5 (1 Disk) ImCon v1.1, InsChar and InsDate, Let 'em Fly! v1.3, MasterBrowse v4.9, OCRv1.4a, Text Analyzer.
- Issue 6 (2 Disks) Apex Media demo v2.14, Freedom v1.14a, Atari World Profile, BootXS v2.21 demo, Egale v2.7i, HPLJ4ENG v1.0, iPRN v1.05, Two-in-One v1.40e, WINX v2.2, GEM RAM v1.6, IKARUS v0.14,
- Issue 7 (1 Disk) Marcel v2.3, Kandinsky v2.02, Dirsort v1.1, SMF-Player, TWP HS-Modem v6, Disk Cake v2.1, Atari World Profile
- Issue 8 (1 Disk) Ruftrade v2, TruDisk v2.3, Zorg v2.02, MBE v1.01, De Capo v2.02a, ST Guide 1.4, Atari World Profile
- Issue 9 (1 Disk) Internet Access Pack: STiK, Crystal Atari Browser (CAB), CAB OVL, IRC.TOS, Teddy-TERM v2.14, FOLDRNNN, NBCBS, Listfont v1.6, Atari World Profile
- Issue 10 (1 Disk) Address v2.04e, HiSoft BASIC listings, Call FSEL v1.1, Protex macros, Spectrum emulator utilities, UDO Release 4.0e, ZControl
- Issue 11 (1 Disk) 1st-Guide 01-96, FastBoot 030 v0.5 Beta, Gemspooler 4.0.12 Beta, JML-Snapshot v3.0, MGIF v5.0, ProgInfo CPX, ToDo v1.01e, HiSoft BASIC listings

Back Issues Order Form

**Credit card
order hotline:
01487 773543**

Prior to Atari World, there were two other great Atari magazines, now sadly lost from the shelves. The much loved ST World sadly disappeared many years ago and is still sorely missed by many diehard Atari owners. The other, Atari ST Review, has now disappeared from the news stands in its original format.

Atari World has been fortunate enough to secure stocks of a limited number of back issues of ST Review and we are pleased to make them available to our readers. If your collection is incomplete, then why not order a copy from us?

Just for you – a Cover Disk rundown

- Issue 25 Equinox Organiser
- Issue 26 GEMView 3
- Issue 27 MasterCAD, and Kobold demo
- Issue 30 Ishar 3 demo, Eclipse, Spectra, and Imagecopy demo (two disks)

Most cover disks also include various utilities.

Make all cheques payable to Specialist Magazines Ltd.

Send to: Atari World, Readers Disks/Back Issues, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambs PE17 2PF

We have the following **Back Issues** of ST Review and Atari World

Please tick the issues you require:

STR25 ☐ STR26 ☐ STR27 ☐ STR30 ☐

AW3 ☐ AW4 ☐ AW5 ☐ AW6 ☐ AW7 ☐ AW8 ☐ AW9 ☐ AW10 ☐ AW11 ☐

Please tick one box only - up to 7 issues:

- ☐ 1 issue: £3.50 ☐ 2 issues: £6.50 ☐ 3 issues : £9.50 ☐ 4 issues: £12.00
- ☐ 5 issues: £14.50 ☐ 6 issues: £17.00 ☐ 7 issues: £19.00

Tick the Atari World **Reader Disks** required:

- Iss.1 £2.50 ☐ Iss.2 £3.50 ☐ Iss.3 £2.50 ☐ Iss.4 £9.50 ☐ Iss.5 £2.50 ☐ Iss.6 £3.50 ☐
- Iss.7 £2.50 ☐ Iss.8 £2.50 ☐ Iss.9 £2.50 ☐ Iss.10 £2.50 ☐ Iss.11 £2.50 ☐

Name.....

Address.....

Postcode..... Telephone.....

Visa/Access/Mastercard/Delta/Switch number:

Signature.....



Expiry: / Switch Issue No.:

Q&A

You send in the questions – our team of experts sets about solving them...



Family Roots 2 – genealogy software from Floppyshop.

Out of Trim

Q For many years I have been using Trimbase (a fairly old database program) which does all I need. The more modern Superbase does not match Trimbase in some important (to me) aspects. My daily use disk – and also my master disk – has suddenly failed in the print module. Luckily I was able to obtain a viable copy from my old store cupboard or I would really be in the cart.

I have several years' records of family tree research and many A-Z lists of Parish Registers and some census returns stored on disk. Please advise on a likely place to seek a surplus master disk.

P Pledger, Selsey

A I'm struggling like mad not to lash out and chastise you for not making backups of your precious master disks! I can't reiterate how important it is, especially as many of us are using software that is no longer published. Always, always, always keep at least one copy of your masters and check them regularly too.

As for helping you, first of all, have you thought of trying one of the dedicated genealogy programs for storing the information? Try Goodman International PD library for a start – or contact Floppyshop

regarding Family Roots 2, a commercial product. Incidentally we ran a feature on genealogy back in AW3 – try our back issues department. As for Trimbase, let's hope one of our readers can help. Anyone got a copy of Trimbase they don't want?

Andrew Wright

Starter

Q I have just started to subscribe to your mag and I have received your disk from issue nine. I have been using my Atari Mega ST2 with four megabytes to run Cubase in my studio since about 1989 and has given me great service (I know nothing else about computers). But I have just bought a second hand 1040 STe with two megabytes and I want to get to grips with the Internet. As I said I have your disk nine and I also bought a software package called Connect which I cannot even uncompress. So to cut to the chase what do I need to get on the Internet as even your disk nine tells me I should get some other software? I just need a list of everything I need and maybe some tips.

TIP NVDI 2.5 and Timeworks 2

NVDI 2.5 does work with Timeworks 2.00a – despite what you say! The NVDI GDOS replacement doesn't appear to like any file extenders other than *.FNT, hence the *.ELQ, *.CGA standard extenders need to be changed so that they have the *.FNT extender.

With TOS 2.06 or Teradesk or something similar, set a file mask to *.CGA, select all the files, go to Show info... and change the whole blooming lot. It's a real pain, I know. Now set the file mask to *.ELQ (or whatever extender your printer fonts have) and change this lot as well.

Now load the ASSIGN.SYS file into a text editor and change all the font names in here as well. You could use a search and replace to speed things up somewhat!

Now, make sure NVDI GDOS replacement is active. Disable the old GDOS.PRQ program from the Auto folder (either rename it to GDOS.PRQ or use Superboot to disable it at boot time). Reboot with NVDI and it should work perfectly. You'll even notice a slight speed increase over the old NVDI/GDOS.PRQ combination!

When additional GDOS bitmapped fonts are added or deleted, you need to run FONTWID.APP. Now FONTWID.APP doesn't like the NVDI GDOS replacement so you'll have to run the original GDOS PRG in order to run FONTWID.APP. Once the latter has done its stuff, you can then disable the old GDOS.PRQ again and carry on with the NVDI setup.

Note also that with my setup (2.5Mb, TOS 1.02, Gasteiner 270Mb HD) I get the message "Invalid Handle \$0000" when loading – just click on Tolerate and away you go or make sure that TOS compatibility is switched on in the NVDI configuration program.

Andrew Gaunt, Leeds

A J Jewell, Hong Kong.

A It's a big subject. We're going to answer this question with a feature about connecting your Atari to the Internet. It will cover everything from finding an Internet provider to the software required. Look out for details in future issues. We'll also be providing further software on our reader disk.

Andrew Wright

Double non-click

Q I wonder if you can help me with a little problem that seems to have developed on my Atari 1040 STe, sometimes but not always. When I double click on a DOC or TXT file instead of getting the Show Print Cancel box the screen goes white as if it is loading a program and then returns to the desktop.

All programs load as they should and Protext will load TXT and DOC files. I have used the Ultimate Virus Killer 6.3 on my collection of disks but that shows them to be OK. I don't think it's the disk drive it's self as it happens on both my internal and external drives. I have TOS 1.62 if this will help solve my little problem.

S F Barszczak, Bradford.

A When I first read this I assumed your STe was trying to load a program via the desktops Install Application feature. Now I'm not so sure. If this were the case you'd get a dialogue box saying "This application can't find the folder or file you just tried to access". Information about Installed Applications is saved to a file called DESKTOP.INF. This happens when you select save desktop in the desktops Option menu.

I think the fault lies with this file. As the fault is intermittent you probably have more than one boot disk. With this in mind it's going to be difficult to track down the offending DESKTOP.INF file. You'll have to install each of your DESKTOP.INF files in turn until the fault materialises. To do this boot your computer using each of your boot disks. Once the fault shows itself you can do one of two things. Delete the DESKTOP.INF file found on the root directory of your boot disk – This is the directory you view when you first open a window – or move the file to another disk for further investigation. Bare in mind that the settings in the DESKTOP.INF file are loaded into memory when you start your computer. So after you've deleted or moved the file you must kill everything in RAM with a cold reset. Switch your machine back on using the same disk but without a

DESKTOP.INF file. This should cure the fault. Remember to reconfigure your desktop and resave.

If you've moved the file you can look at it in a text editor. You should find a line that looks like this: #G 03 04 ANY.PR@ * .TXT@

It shows that ANY.PR@ has been installed to run and load a * .TXT file should you try to open one. Normally, if ANY.PR@ can't be found you'd get the dialogue I discussed earlier. It's possible the file has been corrupted at some stage. Incidentally you should also find a similar line relating to * .DOC files. It might even have been added to the end of the * .TXT line. One other possibility is that the DESKTOP.INF file has a line like this: #G 03 FF * .TXT@ @ It should look like this: #G 03 FD * .APP@ @ It tells your computer that any file with a * .APP ending is a program and can be run as such. Obviously * .TXT files aren't programs and will not run. Sending you straight back to the desktop.

Richard Barton

Load of old TOS

Q Why is it not recommended for users, such as myself with TOS 1.0, to use a hard disk. I recently bought a used hard disk and it seems to work fine with my eight year old machine.

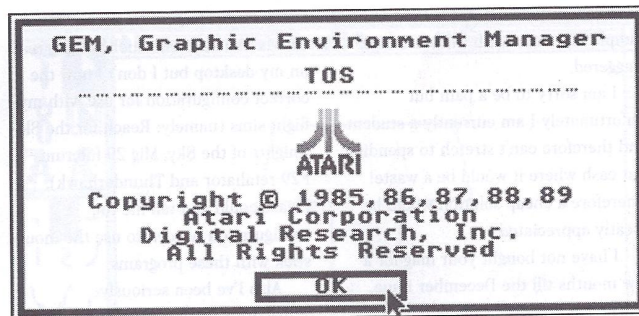
R Cumberland. Prudhoe.

A The simple answer is speed. TOS 1.0 was not written with hard disk drives in mind. Back then it was assumed that a couple of floppy drives was all you'd ever need. You are correct though – it does work sometimes. Success varies from hard drive to hard drive. It's very slow when compared to later TOS versions and your partitions should be no larger than 16Mb. Larger partitions may work but it's not recommended. A simple TOS upgrade will make hard drive and floppy disk access a lot faster – I've done the tests myself and most operations are two to three times faster with TOS 1.4 onwards. TOS 1.4 which is fully hard drive compatible can be purchased from Compo for just £19.

Richard Barton

Read me?

Q How can I get Timeworks to import README files without throwing away the CRLFs at the end of lines. I want to preserve the layout as appears on screen using the Atari "Show" Button.



What a difference a TOS makes...

Why is ST Guide so painful? It keeps freezing shortly after starting. Altering the * .INF file makes no difference, so I can't read the * .HYP file about itself.

Could some of your gurus provide some information on Esc/P2 printer commands as well as the Deskjet ones: particularly those related to Epson Stylus printers.

L N Simcox, Malvern.

A When Timeworks imports an ASCII file it expects two carriage returns at the end of a paragraph. If it only sees one it will flow all the text on one line. There are two ways around this. First press return twice where you'd like text to start on another line. Obviously this isn't a practical solution as it could take hours going through a file adding carriage returns. An easier solution is to import the ASCII file as if it had been created in First Word. This will preserve the text layout and match that seen from the desktops show button. Simply select import text from the file menu. Click on First Word in the import format box then select the ASCII file you wish to import from the file selector.

ST-Guide is one of the most reliable programs I have ever used. As you are having problems with it I can only suggest that it's clashing with another piece of software. Try running it on a clean system and see if that improves matters. You should also try re-installing ST-Guide as it may have been corrupted. See issue 10 page 25 for a full ST-Guide run down.

Let me first point you in the direction of issue 10 page 43. There you'll find a complete guide to the ins and outs of using a printer.

The Esc P2 command gives a printer the ability to have its own scalable fonts. The format of the command is as follows:
ESC X m n1 n2
Where the m parameter sets the pitch, n1 and n2 sets the point size.
Pitch
Simply put, pitch is the number of

letters you fit into one inch. Its abbreviation is cpi. Characters Per Inch.

If m=0 There is no change.

If m=1 Proportional spacing is selected.

m can also equal 18, 21, 24, 30, 36, 42, 60 or 72 using this formula.

Pitch = 360 divided by m so if m = 30 Pitch equals 360/30 which is 12 cpi.

Point

Point size is worked out using this formula. Point size is the height of a character.

Point size equals n1 + (n2 x 256) divided by 2. As a point size can't be over 40, n2 must always equal 0. This shortens the formula to:

Point size equals n1 divided by 2. So to get a 36 point size n1 would equal 72.

To get your printer to print at 36 point and 12cpi you would use the following format.

BasicESC X
CHRS(30)CHRS(72)CHRS(0)

ASCII 27 88 30 72 00

HEX 1B 58 1E R 48 00

For 18 point proportional you'd use:

BasicESC X
CHRS(1)CHRS(36)CHRS(0)

ASCII 27 88 01 36 00

HEX 1B 58 01 24 00

Richard Barton

Three stumps

Q Dear People-who-know-more-than-me, I have three problems:

(We weren't sure who he was writing to but we've answered it anyway – Ed)

I recently acquired a 4 meg STE, with TOS 2.06 for next to nothing because the last owner had a tantrum and punched the keyboard, with the support pillar going straight through the PCB. I fixed it (with ribbon cable) and it works fine now, except for one thing. The TV output is OK, the composite video output (from the monitor port) is also OK but the STE does not like the monitor lead that I made up (and used for years) for my STFM to go to a 8833 MkII monitor.

I have wired up ground, Red, Blue, Green, Horizontal Sync and Vertical Sync but after a while the picture rolls top to bottom. I looked at the outputs (at the monitor port) with an oscilloscope and both sync pulses and colours were OK. However with the cable on there interference appears on the H-sync and V-sync pulses, in the shape of a burst similar to the colour information (ie after the pulse has gone high). Is there a problem with the video driver circuit on the STE or is it the monitor lead with some different wiring needed? I am baffled as I cannot understand why the composite output is unaffected by the problem.

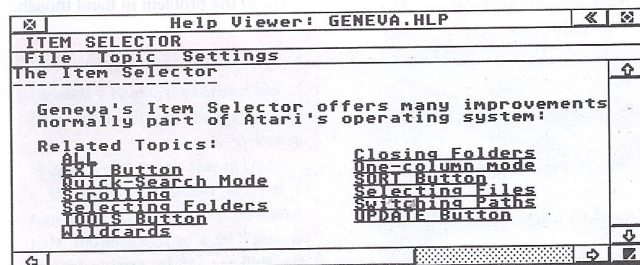
I have three 520 STs (Not FM, F or even M) – the original external power supply and disk drive jobs (They were a fiver each). They all work OK except for the fact I only have one set of TOS chips between them, and I want to get two working simultaneously to allow a musical experiment to occur with these STs providing processing to go into my STFM and Cubase. The TOS I have is 1.00 on 6 chips. Will 1.4 work on these machines, or am I stuck? The other two came with disk TOS boot ROMs, but I do not have the disks for these either.

Do you know of any sample replay software that will allow my STE to act in the following manner:

Load up a selection of samples, with the number dependant on memory not software limit.

Assign each sample a Midi note, and an overall midi channel.

Allow me to set which channel a sample is to be replayed through (left or right).



ST-Guide is a great Atari program.

Allow playback of more than one sample at a time, with the start time staggered.

I am sorry to be a pain but unfortunately I am currently a student and therefore can't stretch to spending out cash where it would be a waste! Therefore a cheap solution would be greatly appreciated.

I have not bought your mag for a few months till the December issue, but I have noted that much has improved in the meantime, and (cash permitting) it will now be a regular thing. Keep up the good work! Yours Spare-TOS-chips-would-be-greatly-appreciated-ly,

D Jones, Bournemouth.

A It's difficult to give a positive answer to your first question. You don't say if you've tried a new lead. I assume you haven't. As we don't have a wiring diagram of your lead I would try one of the following. Your lead in another STe or a new lead with your STe. The fact that your current lead worked for many years doesn't mean it's still OK.

Yes, these machines will work with TOS 1.4. They should take a six chip set that simply plugs into the mother board. TOS 1.4 chips are available from Compo on 01487 773582 for £19 a set.

The program that comes closest to providing the features you require is called EPSS. It's a shareware program. It costs about \$50 to register and a non-registered version is available from System Solutions on 0181 693 3355.

Basic

Q Firstly thanks for producing such a great magazine and for my subscriber's copy of Hisoft Basic 2 (I may not know my compiler from my interpreter or my string from my variable but it's the thought that counts). You certainly knock that mag ST Format for six, which over the last year as Future publishing has transferred the last vestiges of journalistic talent onto its PC titles, has become a retirement home for "Your Sinclair" writers.

On to the problem in hand though.

Fancy earning a tenner?

All you have to do is send us a useful tip for your favourite program — what could be easier!

Send us your hint on a disk, saved as a text file (preferably), along with a screenshot for illustration, or possibly a drawing if it's a "you can build this" style tip. We'll pay £10 for every reader hint that we publish.

I've recently acquired a second hand Gravis mouse stick which works great on my desktop but I don't know the correct configuration for use with my flight sims (namely: Reach for the Sky, Knights of the Sky, Mig 29 fulcrum, F29 retaliator and Thunderhawk). Please could you tell me the configuration needed to use the mouse stick with these programs.

Also I've been seriously considering getting a hard drive. Problem is I have 160 commercial games that aren't supposed to be hard drive installable. Are there any programs that would let me get around the problem?

Finally how about some classic games on the reader disk, they needn't be big block busters, some of the old ones from the mid-eighties that took up a few 100k of memory are still playable.

M W Asghar, Slough.

A There are two types of joystick, the cheap switched type and the more expensive analogue joystick. The first contains four or eight switches that are either on or off. The second gives a more realistic control in games like flight simulators. If you want to bank the aircraft slightly to the right you just move the joystick a little. The more you push the stick to the right the more the aircraft banks.

The Gravis Mouse Stick is an analogue joystick. Game programs need special code to make full use of such a device. We're not sure if the games you list have this special code included. If they do there should be an option to use this type of stick. The only Atari game with an option for the Gravis I've seen is Flight of the Intruder. So if there's anyone out there who can configure a Gravis mouse stick with the games mentioned please let us know.

The majority of Atari games disks are protected by a special boot sector to prevent piracy. This means they can't be copied or installed onto hard drive. If you try and open a games disk on the Atari desktop you'll either see an empty window or a dialogue complaining that data on the disk may be damaged. If a window opens showing files you could try copying them to hard drive. They still may not work but it's worth a try. We are currently on the look out for a best selling game to put on the reader disk. All I can say is "watch this space".

Richard Barton

Timeworks features

Q I'm delighted with the performance of Timeworks 2.04 and SpeedoGDOS 5, but there is one problem I have not been able to solve. When printing two A5 pages (for a magazine) on an A4 sheet in landscape mode the printer ejects after printing one and a half of the A5 pages. I've tried using the Laserjet driver and changing to a larger page size, but the problem persists. I'm running an STe with 4Mb, hard drive, TOS 1.62 and a Deskjet 500 printer.

D Smith, Belfast.

A You've found one of the "features" of Timeworks 2.04. When used with SpeedoGDOS 5, Timeworks has trouble printing in landscape mode. If you use NVDI 3 landscape printing works fine. This is not a one hundred percent cure I'm sorry to say. Using NVDI 3 introduces another feature — Timeworks will not print headers and footers. These print fine with Speedo though.

Richard Barton

Hard is easy

Q Iain Laskey's article in the Jan edition — on setting up a hard disk drive — is fabulous; I've been waiting years for just that, and it gave me the courage to actually invest in one.

Clearly hard disk management is a large topic, and I have a few questions arising out of it for your Q & A section, please.

One often reads about fragmentation of files, and the consequent need for periodic tidying up. Am I right in assuming that fragmentation arises mostly out of constant overwriting of files. If so, would it be possible to avoid fragmentation by keeping the partition reserved for use as a workspace, and to store the finished file in its intended partition only on completion. Or is it more complex than that.

In the event of corrupting a partition, can a single partition be separately re-formatted. Or is it only necessary to delete the contents of the partition.

L Cohen, London.

A It is a good idea to keep all your data files on a separate partition. This stops your program partitions from becoming fragmented too quickly. It also aids backup operations.

The file you are working on is loaded into memory from your hard

drive. While you work on the file it will alter in size. If the file grows it may no longer fit in its original space. The computer will save as much as it can there and save the rest of the file somewhere else. Deleting files also leaves gaps at various places on the disk. This is what causes fragmentation.

Generally fragmentation will cause no problems. Providing you don't let it get too advanced. You may notice a decrease in speed as the drive gets more and more disorganised. Your solution will certainly help slow down this process. The best way to deal with fragmentation is to use a hard disk maintenance program. This will optimise the drive for you as well as carrying out other important hard drive checks. Looking for bad file names, corrupted FAT tables, that sort of thing. A good one will also wipe clean individual partitions without the need to format. Two good examples are: Hard Disk Sentry, available from 16/32 for £35 and Diamond Edge, £49.95 from HiSoft.

Richard Barton

Feedback?

Q Your letter from R D Bird, Q & A Issue 10, really touched me on a sensitive spot. I too have experienced this "..... couldn't give a toss about you mate, we don't support the Atari platform anymore" attitude from some software houses.

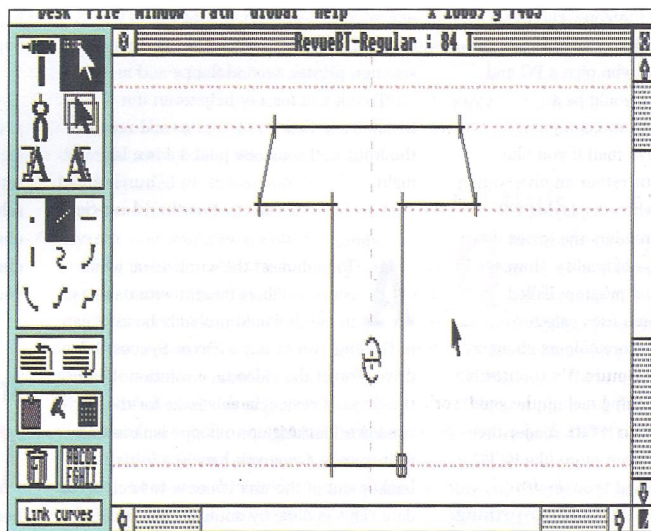
You get the impression that they are mentally adding "More fool you for being a prat and buying from us!" Does this ring any bells Electronic Arts? I have made a mental note of all such companies from whom I will never buy from again in future for any platform. Maybe readers would like to supply further candidates?

Meanwhile, I will be grateful if you would please arrange to forward the enclosed sealed envelop to R D Bird with my compliments.

R Dent. Harrow.

A Thank you for your letter. Yours was the first of many. Mr Bird should have received your mysterious sealed envelope by now. Please accept our thanks on his behalf. May we also thank all the other readers who sent in letters and telephoned our office offering support. It's nice to see this sort of caring attitude in the Atari community.

Andrew Wright



Fonty, the Calamus font editor

Outline fonts

Q I'm not sure if this letter should have been addressed to the Q & A page but are there any tools available with which one can create or edit outline fonts? I seem to recall that some years ago there was such a package for the ST. With most WP and DTP packages now using them, why is this aspect of the subject never dealt with in depth and surrounded by such mystery as if ordinary souls couldn't possibly understand anything more complicated than a bitmap?

An article describing how they are created and how the font files are organised with some guidance on how one could go about it would be most interesting. I use Papyrus outline fonts with NVDI 3/4.

B Wyndham. Malvern

A Yes, this definitely fits the description of a Q & A. There is a program called Fonty that allows you to edit outline fonts. Unfortunately it only loads the Calamus variety (although it will read PostScript formats). We know of no software available for editing TrueType fonts on an Atari. As for Speedo fonts there are no font editors available at all. Bitstream are keeping a very tight hold on their technology and the file format cannot be used or tampered with in any way.

Richard Barton

Four years' inexperience

Q In 1992 I bought my daughter an Atari 1040 STe computer with the Family Curriculum Pack. Since then she has only used

the computer for these disks and a few more games. We have now bought a Citizen printer but cannot print all that we expected to print on it.

She would like to print her designs from the Hyperpaint disk, also we have found that she can type letters from the First Basic disk, but what about the ST Language disk? It doesn't give you any information nor can you put any information onto it. Also how do you get the different types of print (eg italics) onto the printer.

These may sound like odd difficulties after 4 years but we have never got into how this computer really works, so we haven't used it to much extent.

So now we have bought this magazine and decided to learn to use the computer. Maybe it needs upgrading or I need a one to one course on how to use it, or maybe I've bought a **** computer and need something more user friendly that even an idiot like me can use.

Please help me to understand what I am doing wrong. Also we find that we cannot purchase disks for the computer locally as we are told it is too old at 4 years. I find that hard to believe and am beginning to wish I had never bought this make. Please reassure me.

P Snell, St Leonards-on-Sea.

A Your Atari STe is one of the easiest computers to use. It certainly isn't a **** computer. I notice you've been using First Basic to type letters and send them to your printer. This isn't a word processor and as such won't be able to output bold, underline or italics. You need to get hold of a word processor. There are many available from PD libraries such as ST Writer or Marcel. ST Writer is a bit long in the tooth but Marcel is well worth trying. A very good beginners' word processor is Write On. It can output different fonts in various styles. It's available from Compo for £29. It's a pity you didn't tell us which model of Citizen you were using. We could have given you more details. To find out more about printers see issue 10 page 43. Atari World back copies can be ordered on pages 56 and 57 or by ringing 01487 773543.

The best way to output graphics to your printer is to use Imagecopy or Imprint. These will take the files created in Hyperpaint, or any other paint program and output them to your printer without using GDOS. You can of course print with a utility provided with Hyperpaint. However you'll probably find Image Copy or Imprint easier. Image Copy is available from the Fast Club for £34.95. They can be contacted on 0115 945 5250. Or for £14.95 you can buy Imprint from Goodmans on 01782 335 650. As for purchasing software for the ST, just look through the pages of Atari World. You'll see many companies who fully support the STe through mail order. You should be able to obtain all the software you'll ever need through these suppliers.

Richard Barton

CAB driving

Q I have been playing with CAB, trying to make up my own pages as a way of understanding it more and came up with this question. As HTML is a standard language for WWW access, if I made up a letter using CAB and GIF images would it be possible to save it on a PC formatted DS DD disk then

Send us your questions

Can't find anyone to answer that nagging question? Then drop us a line. Our team of experts are on hand to investigate and solve almost anything you can throw at them. Just send your letters to:

Atari World Q&A, Specialist Magazines Ltd, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambridge PE17 2PF
or e-mail them to:

atari_world@cix.compulink.co.uk

While every effort will be made to answer your question within the pages of Atari World, please note that individual correspondence cannot be entered into.

send it snail mail to someone who has a PC for them to read. I ask this because my children have friends who own a PC and this, if it would work, could be an introduction for them into computer comms. A poor man's email if you like. The other question or rather an observation really is that CAB, when displaying GIF pictures at low res, renders the image down with a noticeable loss of quality. However I have seen a demo of a program called "Speed of Light" which uses palette switching to display more colours giving a much more realistic picture. My thought is this, if a palette switching technique could be incorporated into an HTML reader then the Atari could look even more like its PC rivals as far as graphical browsers go.

M Smith, Worthing.

A This is the beauty of the HyperText Mark-up Language or HTML. Providing your friends have a World Wide Web browser such as Netscape, they will be able to read your letters using their PC. HTML files are just ASCII files containing commands from the HTML language. On an Atari they will have the extension *.HTM. If you use a command not supported by your friend's browser it doesn't matter. Their browser will just ignore it. For the full run down on writing HTML files turn to issue 2 page 74. Our series on making Web pages (HTML files) starts there.

I don't know if a palette switching technique will ever be added to CAB. Remember that the GIF files viewed in CAB can also be viewed in Speed Of Light. You can also use Speed Of Light as an external viewer from inside CAB.

Kevin Beardsworth

Hard driver

Q I have recently become the proud owner of a hard disk (I bet you haven't heard this question many times before, NOT) and I am looking to back it up.

I have read the articles in AW about back-up programs i.e. Vault, Turtle and Diamond Back but these all have one flaw in my set up. I would have to back up onto floppies. As you can appreciate this would take a considerable time and many disks. Unfortunately I don't have the resources (read money) to obtain a Zip drive or a second hard drive but I think I have a solution. In the past I thought I remembered a way of backing up onto a standard video recorder. I know it can be done on IBM clones because a work-mate showed me an article in his mag for one, and this is what made me think.

So can it be done or am I whistling in the wind? And if it can be done what do I need? Where can I get it? And how much? And is it viable?

Just in case it matters I have an STe

upgraded to 4 meg, TOS 1.62/2.06, PC Speed, 270 Mb Gasteiner hard disk plus scanner, printer, second floppy and modem.

Thank you for any help, even if it is a knock back. Now I've got to go and repair the front wall someone pulled down last night.

J Caten, Southend-on-Sea.

A To be honest the whole idea, while conceivable, is fraught with dangers. In fact it would probably be as cheap in the long run to buy a Zip or Syquest EZ drive. Forget the video tape solution. Read the Syquest review in this issue for the full rundown. Backing up to floppy isn't as bad as it sounds. Once you have the initial backup out of the way it's easy to keep up to date. This is done by doing an incremental backup. Whenever you update a file on disk the computer sets a flag which is called an archive bit. Backup programs remove this from the file once it's been copied. When you do an incremental backup the backup software only looks for files with the archive bit set. This is usually very quick, even too floppy, especially if you do it once a week.

Kevin Beardsworth

Q I am hoping that by helping me to understand the cause of a problem it might relieve some of my intense frustration. I had been working on K Spread 4 for a number of days, doing some accounts. One morning I loaded one of the files to edit, to delete two cells only. I went to save it and was confronted with "Data on the disk... may be damaged..." (But it saved OK on another disk.)

First I tried to recover some of the files individually by dragging from B to A but the same message appeared. I then tried to copy the disk using Fastcopy III but all I got was "Cannot Access System Sectors".

So, I should like to know what has happened. Why did everything appear to be all right one moment (otherwise I would have been unable to load) then, all of a sudden complete disaster. How could a disk be "damaged" so quickly for no apparent reason?

I have a 520 STFM upgraded to 4Mb. The disk that has gone faulty is fairly new and manufactured by Virgin Euromagnetics.

J G George, Cardiff.

A It sounds as though you've encountered either a bad disk or more likely the infamous media change bug. All versions of TOS have a problem detecting floppy disk changes. When TOS first reads a disk it stores the disk's FAT table in memory. FAT stands for file allocation table - it's like a street map. It tells your computer the whereabouts of files on your disk. When you change disks the floppy drive tells the computer the disk has been changed. The ST should then read the new disks FAT table. This doesn't always

happen. When the ST next writes to the floppy, the disk becomes corrupted.

To avoid this bug do the following:

If you only have one floppy drive then you should always save your data files to logical drive B. To do this whenever you first save a document select drive B from the file selector. When prompted by the program change disks and insert your data disk. Only change disks when prompted to do so by your computer.

Richard Barton

ST-Guide guide

Q Could you do a small item for us beginners, and explain what ST-Guide is, how to install it, what benefit it provides and anything else of interest?

I have a 2Mb 1040 STe, with an external floppy and TOS 1.6/2.06. I have been trying to install it (ST-Guide) since issue one, yes I know it must be me, but there must be others too.

Is it possible to use an IBM keyboard, or monitor model number 8513002, with any adapter?

PS When will the next *Atari World* show be? I enjoyed the first one.

P Wood

A We covered this in the Ground Breakers series in AW issue 10 page 25. I assume you wrote in before you saw it. If you're still struggling we'll certainly consider a tutorial on it.

Yes and no is the simple answer. No for the monitor on a standard ST, yes for the keyboard. Contact System Solutions and enquire about their AT Keys keyboard adapter.

We had a great response after the Christmas *Atari World* shows. All we can say is there will be another show. We haven't fixed any dates yet. You can be sure to see it in the *Atari World* news pages as soon as there is any further information.

Andrew Wright

Music man

Q I am a newcomer to computing having acquired a 1040 STe, SM124 and Amstrad 3160 printer some months ago. So far my use of the Atari has been solely word processing using First Word. Now that I have discovered *Atari World* I feel encouraged to venture into MIDI applications from my Yamaha US-1 Organ and the use of a modem. I should be grateful for information that will set me off in the right direction.

For MIDI, I do some arranging and a little original composing for Flute Ensemble using up to twelve parts. I have Steinberg Pro 24 which I am told is considered out of date and a PD program Score Perfect which does not seem to suit my purposes, so could

you advise me if Cubase or Notator or something else would be what I need?

My son-in-law has given me his discarded modem, a Courier V.32 turbo Fax with ASL. Is it compatible with my 1040 STe and what software/hardware would I need to operate it?

A Montgomery, Newtownards

A Pro 24 may be a little out of date but is it doing what you want it to? It will certainly give you a good grounding in this sort of application. After all it is the forerunner to Cubase. Try to find a good music shop in your area that can demonstrate Cubase and Notator. Alternatively visit one of the music shows. Why do you need to do this? Well, they are both excellent products, but they do the same thing in different ways. You need to see them both working and decide which one suits the way you work best.

Now to your modem. Yes it is compatible with your ST. We did a massive 13 page feature in issue 9 on the ins and outs of using a modem and the sort of software you need to get up and running.

Richard Barton

Frustrated Atarian

Q Please, Please, Please! - Help a poor old utterly frustrated "Atarian" back to sanity!

I have spent the last fortnight, just about, trying to obtain sufficient assurances to allow me to pluck up the courage to buy a Hewlett-Packard printer that will work with my existing Atari STe (4 meg) computer with very little success I have to say.

I started out wanting to buy the HP Deskjet 850c or failing that the model 660c and I could hardly believe my poor old ears when several different technical support personnel responded to several different answering machines and informed me that none of them had even the faintest clue as to whether or not I could get their printer up and running after purchase unless I could run "Windows" - which I can't!

I then tried Mike Goodman of Goodman Enterprises who was very helpful and who spent a lot of his time discussing the problem with me before sending me the public domain disk No GD1184 "Deskjet/Laser Drivers" but still I had no positive assurance that this would solve the problem for me.

Forging blindly ahead, and being only slightly knowledgeable about such matters, I next contacted Hi-Soft who agreed that I could not run the Hewlett-Packard HP Deskjet unless I bought Papyrus Gold and Speedo GDOS - even then they were doubtful but assured me that if I bought the model 560 it would definitely run OK and give me the full 600 by 600 dpi which I need together with the option of colour as required.

So!!! I telephoned all over the UK (or so it seemed) but could not locate the elusive creature - for by now I felt I was on some kind of Safari! Hewlett-Packard was unable to help in this either as it is now a discontinued model. Even a used machine being returned to various suppliers approached, I was told, was back out within days. No one would even take my number and ring if one came in - they hadn't time for that! Awww! Poor man!

At this point I slammed the phone down in disgust, poured myself a scotch and wearily opened my current copy of *Atari World* - of all places at page 18! God bless you for that article on the Hewlett-Packard 600!! I was 74 when I started on the search although by this time I felt very much older.

I have a B/W monitor, a 30 meg hard disk and a Citizen 120D dot matrix 9-pin printer. I also have Timeworks Publisher 2 available on my hard disk. From your article I assume that if I bought That's Write 3, I should be OK with my 4meg Atari STe? But what about the tag at the bottom of page 18 "Cons. Drivers only for Windows? Ignore? Think I'll hae anither Scotch man, this is drouthy work!!

PS As well as 600 dpi, I need better fonts. I'm trying to create a book of 30 historical and hysterical songs of the Trossachs, in conjunction with EX Score, which when configured to Citizen MSP10 gives me an excellent print out on my present dot matrix printer.

PPS What do I need to add to access the Internet?

A E Bairney, Gartmore

A This printer will work with your Atari but you're going to have difficulty using all its features. Building a page in four megabytes of memory at 600 dpi is going to be a tight, if not an impossible fit. You should have no trouble building a page at 300 dpi however. If this resolution is output to a good quality paper it will be almost impossible to tell the difference.

The main problem is that the Deskjet 600 is supplied only with drivers for Windows running on a PC. You will have to get your Atari drivers from elsewhere - Mike Goodman's disk is a good start. Programs like Papyrus will drive the Deskjet 600 through SpeedoGDOS but you won't get full 600 dpi resolution. The only time you get full 600 dpi resolution is when you print directly to the printer using its own internal fonts.

That's Write 3 comes with a driver that will drive the 600 and though it's not supplied with a specific 600 driver, it will print to this printer at 600 dpi. Most Hewlett-Packard printers are backward compatible with earlier drivers. Obviously the early drivers can't use all the new printers features but they will certainly drive the Deskjet 600 at 300 dpi. With the built in

resolution enhancement technology I doubt you'll notice the difference.

As for accessing the Internet see my reply to A J Jewell in this month's Q and A.

Richard Barton

Old Ataris

Q In December 95 Q & A, you had a letter from a Mr A Davies of Hertford, who was enquiring if it was possible to transfer games from 800XL 8 bit to an STFM, to which you gave a negative answer.

It is possible to transfer games to an STFM and run them by using an 8-bit emulator called ST Xformer, which was a shareware program from Darek Mihoocka, PO Box 2624, Station B Kitchener, Ontario, N2H GN2. I have up to version 2.55.

It emulates the 8-bit blue screen DOS 2.5 and data can be transferred from the 1050 disk drive, which was the one used on the 8-bit, to an ST. You need to use a cable made up from a lead with the 8-bit Molex plug on one end and a "D" plug to go into the printer port on the ST. Be careful with the wiring or you can blow your ST up.

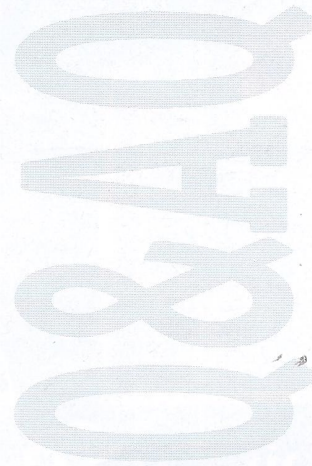
I have tried this it works OK, although it runs at about 80% of the 8-bit and I could not figure a way to run a printer, once I had configured the port. Also if required it can run the 8-bit 1050 drive from the ST as an external drive.

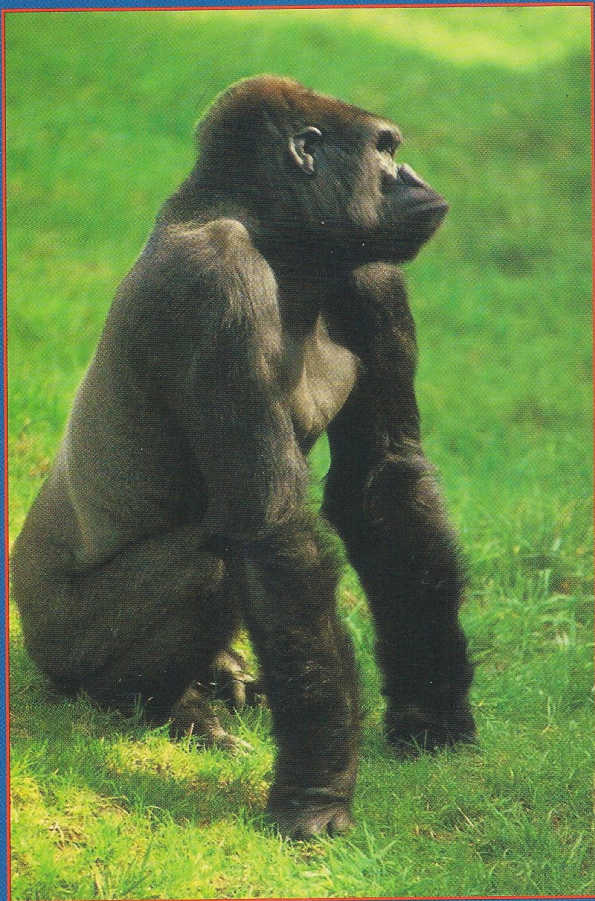
On the subject of disk drives for the ST, I bought a replacement drive (AT Version) for approximately £20 from a PC stockist called Hobbykit Ltd, Unit 19, Capital Industrial Park, Capital Way, London NW9 0EQ. Phone 0181 205 7485. It works OK, I just had to twist the ribbon cable and reverse the jumper pins on the back.

N Ashby, Eastcote-Ruislip

A Thanks for the information - I'm sure Mr Davies will find it very useful. And thanks to everyone else who wrote in or emailed us.

Andrew Wright





MIST THE SALE?

Our Christmas '95 sale was a stunning success and you *could* be sad that you missed it ... but there's no need to go ape with frustration - just like Sigourney's gorillas our offers *have* been rescued from extinction until the end of February '96.

From programming languages to real-time video digitisers, we have something that should appeal to any discerning Atari enthusiast who wants to get the most from his or her Atari computer.

To take advantage of these bargain buys just call us, free, on 0500 223660, armed with your credit/debit card details, or write to us enclosing a cheque or postal order. Please add £3 P&P to each order for delivery within the UK. We will despatch goods within 5 working days or, for only £6 postage and assuming the goods are in stock, we can get your bargain to you on the following working day. Please quote reference ATW96 when ordering.

SCSI

270Mb SCSI	£159
850Mb SCSI	£289
2x CD-ROM	£139
Zip Drive SCSI	£189
Link 2 SCSI	£65
Extends Pro	£29

All drives need a SCSI interface such as the ICD Link 2, unless you already have a suitable SCSI interface. You can chain up to 7 devices on one SCSI interface.

Languages

Lattice C Version 5.60	£69.95
HiSoft BASIC Version 2.10	£39.95
HiSoft Devpac Version 3.10	£39.95
HiSoft C Interpreter	£10
FirST BASIC with full manual	£10
Personal Pascal	£29.95
Devpac 3.10+BASIC 2.10+	
Lattice C 5.60 Bumper Pack	£139
The Atari Compendium Book	£30

Utilities

Diamond Back 3+	
Diamond Edge 2 Pack	£79.95
TruePaint	£12.95
TrueImage	£12.95
XBoot 3 + Saved Pack	£29.95
TrueImage +	
TruePaint Pack	£19.95
ProFlight	£10
MasterCAD	£5

Home Office

Productivity Bumper Pack (Papyrus Gold 3 + Twist 3 + NVDI 3)	£199
Papyrus Gold 3	£89.95
Twist 3	£79.95
Twist 2	£49.95
Atari Works	£59.95
Personal Finance Manager Plus	£10.00
Harlekin 3	£39.95
Superbase Professional 3	£39.95

Music/Video

Music MultiPack (StereoMaster, Quartet, Concerto)	£39.95
Replay16 16 bit Sampler	£89.95
VideoMaster ST+	
ColourMaster pack	£79.95
VideoMaster Falcon+	
ColourMaster pack	£99.95
ColourMaster RGB Splitter	£39.95
Replay Stereo 8 bit Sampler	£39.95

all offers subject to availability
and only valid until 29/02/96
© Copyright HiSoft 1995
E&OE.



HiSoft SYSTEMS

The Old School, Garsington
Bedford MK45 5DE UK

Tel: +44 (0) 1525 77888

Fax: +44 (0) 1525 77575

Credit/Debit Card Orders 0500 223660

Just call Freecall 0500 223660, quoting your Access/Mastercard/Visa/Switch/Connect card number and expiry date and we will despatch the goods within 5 working days. Add £3 P&P within the UK. For an extra £6 we will despatch the day of order by ParcelForce 24 hour service.

Looking for a MIDI Sequencer?

Don't want to pay £399?

System Solutions

has a special deal for You.

**UP TO
50% OFF**



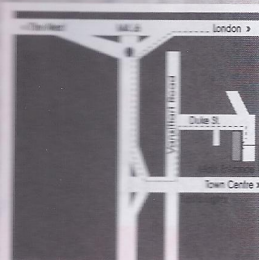
R.R.P.
£399
incl. VAT



Our Price
£249
incl. VAT

Phone us to find out how to get Cubase 3 for only £199 incl. VAT

Prices include VAT and may change without notice - UK P&P £10.00 courier. E&OE

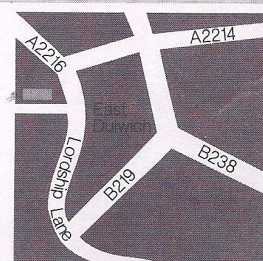


MAIL ORDER,
Windsor Business Centre
Vansittart Rd, Windsor, SL4 1SE
Fax: (01753) 830344

(01753) 832212

SHOWROOM,
17-19 Blackwater Street,
London, SE22 8RS
Fax: (0181) 693-6936

(0181) 693-3355



System Solutions and the Atari Workshop are tradenames of Brandt Fernandes (Europe) Limited. Company registered in England 2612998.